

area. Last year he was invited to give keynote addresses at conferences in Japan, Chile and the USA. Glenn is currently supervising seven graduate students in forest ecology.

Recently Glenn, along with Andrew Wells and Richard Duncan, had a paper accepted for the *Journal of the Royal Society of New Zealand* on the occurrence of widespread even-aged stand establishment in Westland. They give evidence for periods of greatly increased stand establishment 200-300 and 500-550 years ago. They suggest this may have resulted from massive earthquakes.

Dr David McNeil has also been promoted to Reader. David is a plant physiologist who has, in recent years, specialised in perennial nut crops. He is the national coordinator of research for the Tree Crops Association of New Zealand.

Other

Dr Hugh Bigsby is on study leave in Canada until the middle of 1998. In addition Dr Sandhya Samarasinghe and Dr Don Kulasiri (specialists in timber drying and wood science) are both on study leave during 1998.

Forestry fusion: School of Forestry and Forest Research Institute prepare for cohabitation

Research scientists and technical staff from the South Island branch of the New Zealand Forest Research Institute will join faculty of the School of Forestry in the newly-completed extension of the forestry building at the University of Canterbury.

A celebration on February 18 has been planned with Vice Chancellor Brownlie introducing the Honourable Dr Lockwood Smith, Minister of Forestry, and Devon McLean, General Manager, Carter Holt Harvey Forests and member of the board of FRI, replying on behalf of FRI. Representatives and leaders from across the forestry sector in New Zealand were invited to attend and tour the new facilities with exhibits of the latest research from FRI scientists, School of Forestry postgraduate students and faculty on display.

School of Forestry personnel and FRI scientists are excited about the new building and the new arrangement sparking new ideas in research and teaching. FRI

and the School of Forestry should become strong partners in their twin endeavours of teaching and research.

Dr Kenneth Hobson, a new staff member at the school, is exploring new research topics in forest entomology with postgrads and colleagues:

- *Hylastes*, black pine bark beetle bio-nomics, host selection, damage and control with doctoral student Stephen Reay;
 - insect biodiversity in response to various forest management regimes with masterate student Diane Jones, faculty colleague Dr Nora Devoe and entomologist John Hutcheson;
 - *Platypus* pinhole borer chemical ecology, pheromone identification and options for management with post-doctoral scientist Dr Ecki Brockerhoff.
- Ken is enjoying getting acquainted with New Zealand colleagues and forests and would like to hear from people who are interested in the above topics.



Indigenous forest fire protection

Sir,

With reference to Colin O'Loughlin's article in the November 1997 issue, "NZIF develops a new indigenous forest policy":

From the summary outlined it is obvious that a very intensive study of indigenous forest needs has been made by the Working Party on behalf of the Institute.

One puzzling omission, however, is that there is no mention in the summary of any need for indigenous forest fire protection?

Summary No. 4 deals with the "enhancement of the current integrated research effort" concerning control of animal and plant pests. Why not forest fire also?

Summary No. 5 says "The NZIF advocates and supports the establishment of a comprehensive national indigenous forest health surveillance system ...". In my opinion, a similar policy should be in place for the protection of indigenous forest against fire.

As most of us surely know, our original indigenous forest estate was greatly reduced by the ravages of fire. R. Cameron 1964 and L. McCaskill 1973 are good authorities.

Forest and Rural Fire Legislation has been developed over the years to help protect our remaining forests and other areas of vegetation. The Minister and DOC are responsible for the protection of State areas against fire (as well as some private ownerships). Protection of private indigenous forests will largely lie with District Rural Fire Authorities.

There is also forest fire research being carried out at NZFRI with an indigenous vegetation content.

Fire has burnt over 20,000 ha of DOC vegetation, including high forest, since 1987 (pers. comm.) and costs have been high — not only in the monetary sense, but ecologically also. Losses have occurred in private indigenous ownership also, but precise figures are difficult to obtain at present.

I have written to the Chairman of the Working Party suggesting some changes to the Draft NZIF Policy as well as to some individual NZIF members, asking for support in rectifying the omission of any policy statement on forest fire.

Hopefully other members will come to the aid of the party?

Neill Cooper

References:

Cameron R.J. 1964. Destruction of the Indigenous forests for Maori Agriculture during the 19th century. *NZ Journal of Forestry* 9, 98-109.

McCaskill L.W. 1973. *Hold this Land. A History of Soil Conservation in New Zealand.* Reed. Wellington.

Draft Indigenous Forest Policy

The draft Indigenous Forest Policy has had a long gestation period and has been put together by people with impressive credentials. I do not intend to comment in detail but rather in broader terms.

1. Indigenous forests are subject to change over time for a variety of reasons. Some of these changes can take place over a relatively short period (the death of totara in a number of North Island forests in the 1960s and 1970s), while others can be long-drawn-out affairs (the displacement of silver beech by mountain beech).

Attempts to manage forests as though they are frozen in time and complex ecosystems will remain constant and will in my view only result in failure. The forests which colonised the last Taupo ash shower give us some idea of how resilient and aggressive our forests can be.

Surely the first problem to be tackled is to develop management systems which will ensure restocking following logging. When this is achieved the other forest values will follow.

I suggest that the system of clearfelling and leaving seed trees, as practised in the Alton Valley in Southland, has been reasonably successful in restocking silver beech forests. I would also suggest that ecological diversity will be maximised in forests carrying a range of age classes and forest health will be improved. Have a look at Waipoua Forest which has one of the finest collections of stag-headed trees in the country and compare it with Russell Forest which was logged many years ago and now carries a vigorous kauri/podocarp/tanekaha forest.

The point I am trying to make is that our indigenous forests can be managed to produce a sustainable yield of high-quality timber without impairing other forest values, but rather improving them, provided management systems are not dictated by some undeclared edict to maintain the status quo.

2. The protection of soil fertility and soil stability are two of the more important functions of forests, and to fill these roles forests should be in good condition.

The collapse of the canopy species in parts of the Kaimanawa and Tongariro National Park forests was a timely reminder of the vulnerability of our natural forests. Apart from limited areas in the Kaimanawas these forests were undisturbed by man but the collapse of the canopy was spectacular. In the east where some management was carried out to promote the domination of red beech in the next crop there was no such collapse.

Similarly, I have difficulty in coming to terms with the proposition that ecosystems must not be modified in view of the well-documented propensity of kauri forests not only to cause serious loss of soil fertility but also to significantly degrade the structure of the soil and the presence and activity of soil biota.

It is certain that actively-managed forests would solve most if not all of these problems. If the retention of biodiversity is of real concern I presume the whole ecosystem is included. If that is the case then there will have to be some sort of a trade off if kauri forests are to be retained totally unmodified and no active management practised.

There are also the areas of second crop kauri to be considered, as most of these are in Crown ownership. They offer one of the best options for the sustainable production of one of the finest timbers in the world.

If the profession of forestry is to be considered to have any substance at all, then surely the Institute must make an attempt to counter the lock-up policies advocated by the environmental lobby and assorted political opportunists.

3. I agree a good data base is essential but I am surprised the existing National Forest Survey and Ecological Survey data are not being used at least as a starting point.

Of more importance in my view is the need to identify regenerating areas of commercial species, their extent and their suitability for future management. There are many such areas in locations extending from Stewart Island to Northland. In addition, some regenerated areas have been given varying degrees of silvicultural treatment and these should not be forgotten. A small amount of kauri planting was carried out in Northland and Great Barrier Island and the results from this work should not be lost. However it is probable that the plantings on the Barrier have been lost because of lack of tending. I presume Timberlands is continuing to plant the cut-overs on the West Coast, so that area at least has a degree of certainty that forest management will be continued and developed.

4. The Forests Act has become one of the weirdest pieces of legislation that our Parliamentarians have managed to produce, but it appears to have been accepted without comment by the Council. It not only largely negates the purpose of the Resource Management Act by setting out conditions which make sustainable timber production almost impossible. I find it difficult to understand how detailed management prescriptions, which in themselves make little sense and certainly do not "promote the sustainable management of the country's natural and physical resources", come to be written into legislation. No management prescription can accommodate the range of conditions which exist in any forest or forest type and flexibility is essential if management is to be effective.

5. It would be useful if there were definitions of terms used in the draft policy. For example, when we talk about indigenous forests do we include areas of seral vegetation, and if so does this have to be totally indigenous or could it incorporate some exotic species?

6. If the policy is going to function there would appear to be a need to have a reasonable number of well-trained and experienced people on the ground. In the light of the present Government's reluctance to allow any increase in public spending and what is known of the new organisation of the Ministry of Forestry when it is incorporated in the Ministry of Agriculture, it is probable that the policy will become little better than a wish list.

The proposal that the Institute should

become involved in monitoring the effectiveness of this policy could raise some quite serious difficulties, not the least of which would be getting people on the ground with the necessary skills to do the monitoring.

I think the Institute could make a greater contribution to indigenous forest management by ensuring that work, which has already been started by way of various trials and management practices, is at least recorded and where possible continued.

At one stage New Zealand was providing technical assistance and leadership in developing management systems for tropical rain forests, which are similar in structure to many of our own forests. This is no longer the case, even though our ex-Prime Minister, Mr Bolger, not too long ago, said that it was by providing this sort of expertise that we could help developing countries in the Pacific.

The draft Indigenous Forest Policy has considerable merit, but in my opinion the first thing which needs to be sorted out is the Forests Act, which as presently written is almost hostile to developing management systems which will ensure sustainable production from suitable areas of these forests, and their retention in a healthy and vigorous condition. This surely must be the primary aim of this profession.

I also suggest that the State, as the owner of 5,061,000 hectares of indigenous forest of which only 142,000 hectares have been allocated for production, hardly demonstrates a commitment to the Resource Management Act.

With the substantial amount of evidence on the ground of the management possibilities of kauri and beech forests, the profession of Forestry has stood on the sideline and let the present position develop without protest. This is surely a very sad state of affairs.

**G.M. O'Neill
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Sharing risks of longer rotations

Sir,

I enjoyed reading Piers Maclaren's article (November 1997) regarding wood quality. As Maclaren points out, risk can be an important issue in deciding when to harvest. Typically, the plantation owner hears all the risks associated with longer rotation lengths. But what if sawmills were willing to share some of the risks in order to improve wood quality? Let's consider the following options for a farmer who has just paid cash for a large tract