

shelter and the growth advantages of planting plantations on farmland, without, but preferably with, grazing), then we could see an explosion of new planting. There would be major advantages to the country, especially in the regions, in increased employment, increased environmental protection, risk spreading and increased future prospects.

Since the plantation expansions will be most likely to be done by farmers rather than the larger companies it would be unreasonable to expect industry to fund that research, or to be very involved in a setting of research priorities for that expansion.

Given:

- New Zealand's relative smallness as a wood producer,
- the pressures on other forest resources,
- the vast volumes of wood used by the world,
- the unlikelihood of massive substitution,
- the small proportion of the world's wood that comes from plantations,

it is reasonable to assume that markets will not be a limiting factor for plantations being harvested next century.

If New Zealand land owners had confidence in the future of forestry and if conditions were favourable to tree crop establishment, New Zealand could establish a further three million hectares of plantations over the next 30 years (i.e. at a rate of 100,000 hectares of new planting per year). That represents just over 20% of New Zealand farmland. Agricultural production could be expected to decline but by only about 10% as young and middle age stands could be grazed. With management the loss of agriculture production may be even lower.

While those forests are being established and tended there will be major employment opportunities in the regions. There would also be positive environmental benefits in soil stability, CO₂ reduction, etc.

The major benefit, however, would be long term when these forests are harvested. From around 2020 onwards New Zealand's exports could have increased to a level of around 80 million m³ annually. That would make us a large producer, but we would still be only producing less than half what Canada does now and only about 20% of the USA's current production.

Exports of 80 million m³ per year offer New Zealand a major source of overseas earnings. In 1990 dollars, if that volume were exported as logs and chips then they would earn around \$6.5 billion per year.

If our exports remain in a similar proportion of logs, sawn timber and pulp and paper as they were in 1990 then 80 million m³ could earn New Zealand around \$17 billion (or more than all exports from New Zealand in 1990).

If New Zealand attained processing levels currently achieved by advanced countries like Sweden then the earning potential of 80 million m³ (about one-third of which could be in pruned logs) could be in excess of \$30 billion or double our current export earnings. And that would be achieved from using only 16% of New Zealand's land area (4.3 million hectares out of a total of 26.9). Farm production through the loss of land to forestry would be down less than 10% (i.e. equivalent to around \$1 billion in overseas earnings).

Only Chile has the potential to match this performance in the same time period. Even if she followed New Zealand's lead the market would not be significantly affected.

A target of 100,000 hectares per year for 30 years is realistic. But just as in the 1960s, research is needed to seed the opportunity and to underpin its progress.

That research expenditure, as it was in the 1960s through to the 1980s, will be repaid hundreds, if not thousands, of times over. Because the results of research cannot be patented and because most, if not all, additional planting will be done by small land owners and not by industry, Government must play a key role in research funding. Some benefits will be immediate in increasing investment and jobs (all of which will be in regions). But the long-term benefits offer the potential to change and strengthen the New Zealand economy more than probably any other industry. For such a potential to be realised requires a major rethink of forestry research funding and its direction.

ANZIF Conference, Christchurch 30 September – 4 October, 1991

Hugh Stevenson

The third combined conference is now less than a year away – almost a modern forestry career!

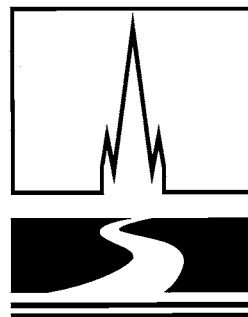
The Christchurch based committee is working hard to organise a technical and social programme worthy of a joint conference in THE CITY THAT SHINES.

By the time this goes to print, the Committee hope to have the abstracts for papers in their hands. Those to hand already indicate a stimulating discussion

on the chosen theme, "New directions in forestry: THE COSTS AND BENEFITS OF CHANGE", concentrating on the impact of Government driven restructuring on the New Zealand economy.

The main themes and session titles are:

- a) Marketing Australian and New Zealand forest products



CHRISTCHURCH
THE GARDEN CITY

The city that shines

- b) Raw material or added value exporting
- c) Planning and managing a sustainable environment
- d) Notable agroforestry developments
- e) Socially responsible forestry in Australasia.

The pre-conference tour, featuring the many beauty spots of Godzone's mainland plus local facets of primary production, is being finalised and is available for all conference participants and families and, depending on numbers, other interested people. There will be a chance for visitors to see North Island forests too, in a post-conference tour.

The conference field trips are designed to highlight different aspects of Canterbury plains and high country forestry, with beautiful scenery thrown in and an enjoyable relaxing atmosphere guaranteed.

The last joint conference in Hobart in 1985 is still spoken of with great enthusiasm by those lucky enough to attend and the Christchurch experience will be no exception.

If you haven't been to an NZIF conference for a while, make a point of not missing this one. Meet up with your fellow graduates at the School of Forestry's 21st reunion which will be celebrated during the conference. For

those who trained at ANU or Yarralumla, meet up with your old friends too.

This conference represents a chance to make new contacts and renew old ones. Find out what is happening where and to whom.

The committee will arrange a variety of accommodation to meet all budgets. Ring now to book bed space if you have colleagues in Christchurch.

Registration Forms

Registration forms will be distributed through the journal in the New Year.

FORESTRY IDENTITIES

JACK HENRY

This is the first in a series of articles on Forestry Identities, written by Geoff Chavasse.

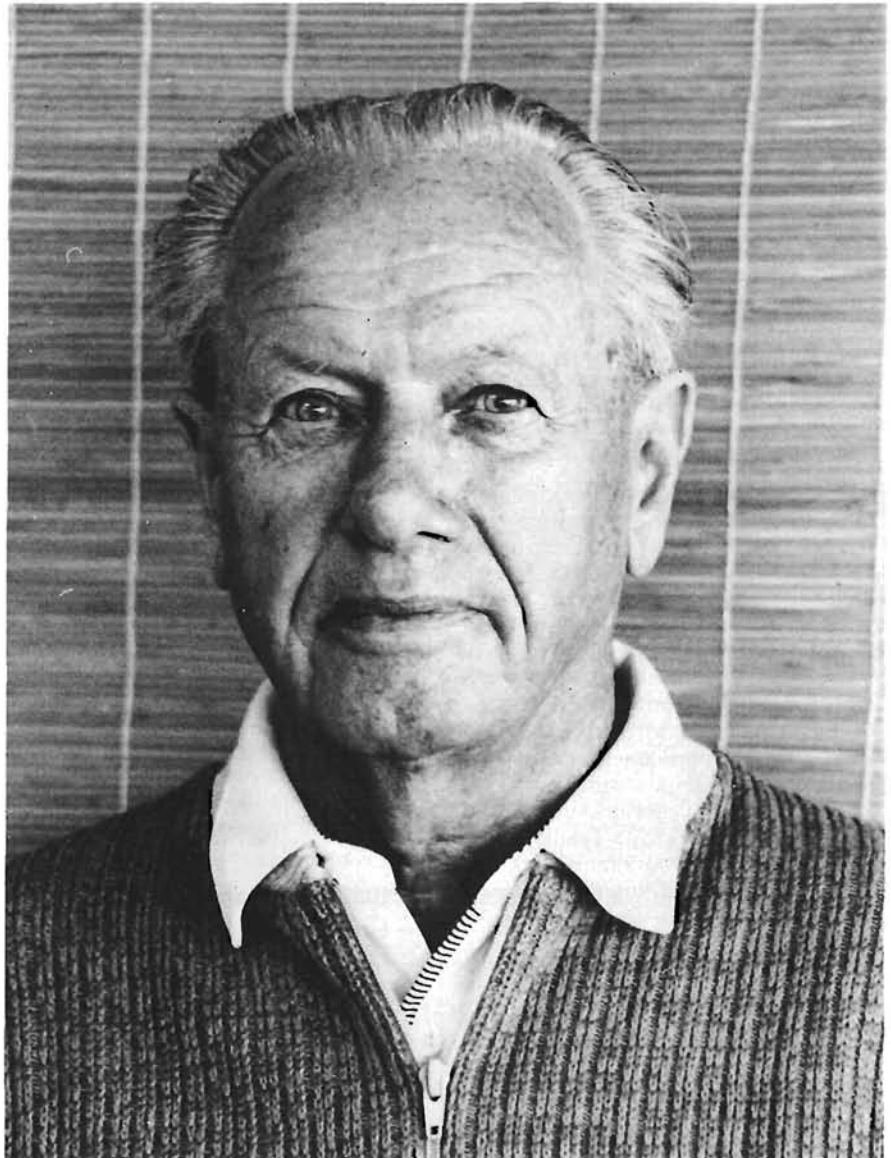
C.G.R. Chavasse

"Laddie, we must not make the mistake of doing nothing." These were the words Sir David Henry, Chairman of NZ Forest Products Limited, said to Jack Henry in 1956 when he was trying to persuade the company that it ought to invest money in tending its huge forests. Jack followed the prescription for the rest of his career.

Jack is a loyal man, and also acknowledges his debt to Alex Entrican whose approach to the Minister of Forests just after the war made it possible for Jack to go to Otago University to study botany. From there he graduated B.Sc. in 1949.

Jack's story is one of dogged progress from the bottom to the top. He was born in June 1917. He left school in 1931 having passed a Proficiency Examination. Times were hard. He worked on farms in Northland, the Waikato and Australia before joining the State Forest Service in 1938 as a labourer. He camped out in Kaingaroa, Murupara, Waimaroke and Wairapukau, planting, pruning and working in the nursery. In 1939 he was appointed cruising foreman at Te Whaiti just as tractor logging commenced in native forests.

There was a break in 1942 to 1945 when Jack served in the RNZAF in the Pacific as a fitter-turner, but his life was to be devoted to forestry thereafter. During university vacations he worked with Jack Holloway on Forest Survey in the initial studies of the Longwoods and western Southland beech forests. He was a member of the New Zealand-American Fiordland Expedition in 1949 before moving to the Forest Research Institute.



In October that year he joined NZ Forest Products as Assistant Forest

Administrator for 176,000 acres of untended plantations. At that time 50%