"The Parks and Recreation Department shall run courses and lectures and produce displays and publications on the Garden and its plant collections".

"Information and interpretation plans for specific areas and plant collections shall be investigated and prepared as resources permit (e.g. Main Garden, Rose Garden, native forest areas, historic conifers, etc)."

Management Plan Policies specifically for the conifers

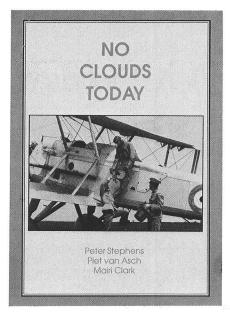
These are set out on page 15 of the Management Plan. They contain:

6.1 "The position of the scientifically important conifers shall be recorded and mapped. Forestry scientists shall be consulted at the time the map is prepared. The map shall be included in the Management Plan." (This task has been completed.)

6.2 "These trees shall be managed and maintained to ensure their survival for as long as is practicable."

6.5 "An opportunity exists to use the historic conifers as the basis for an interpretation programme focusing on the link between these conifers and the beginning of exotic forestry in New Zealand –"

Here is a chance for forestry interests to develop sample areas and tuition on basic forestry matters in the most advantageous setting in New Zealand – within cooee of politicians! The Parks and Reserves Department of Wellington city would welcome proposals.



military establishment. The following chapters then cover interdepartmental co-ordination, NZ Aerial Mapping, Royal New Zealand Airforce, Department of Lands and Survey, NZ Forest Service, Ministry of Works and Development and other government departments.

The chapter on the NZ Forest Service provides interesting details on mapping of the National Forest Inventory, forest mensuration tests undertaken by Avery and Canning in the early 1970s, uses made of aerial photography in forest

management, tests of colour and colour infrared films, development of Small Camera Aerial Photography (SCAP) and assessment of the use of helicopters for forest mensuration by John Firth. While these areas were well presented, it is felt, that this chapter would have been more complete if it included information on the use and type of photogrammetric instruments in the Forest Service Conservancy Offices and provided information on the tests undertaken with both satellite and an airborne scanner image-

A further chapter gives information on Post-War Non-Government Aerial Surveyors which includes details of NZ Forest Product's and Tasman Forestry's activities.

The book is rounded off with a look at the likely future and a postscript giving changes in government administration since 1987. The appendices give technical information, cameras, films, aircraft and maps produced for those who are interested in the technical detail. Finally sources of information are listed.

I found this book most interesting. However the number of styles of writing tended to make it a little difficult to read. Overall this does not detract from a publication that fills a gap on the historical development of aerial photography in New Zealand.

N.P. Ching

BOOK REVIEW

'No Clouds Today'

Peter Stephens, Peit van Asch, Mairi Clark, 1991. Dunmore Press Ltd, Palmerston North, NZ. ISBN O 86469 134 3, 280 \times 210mm, Limp, 279 pages, 130 photographic prints with 8 pages of colour. Price \$39.00 incl. GST.

This book provides a very good record of the history of vertical aerial photography in New Zealand from the 1920s through to 1987. It gives an overview of the people and organisations involved along with some of the equipment and uses made of aerial photography. No Clouds Today will be of most interest to those involved in aerial photography or with an interest in mapping.

The initial chapters cover the early days and relate mainly to aircraft, camera and personnel within largely the

In our Contemporaries

What's new in Forest Research

No. 207 FRI modelling systems help evaluate profitability of agroforestry
No. 208 North Island kokako – Struggling to breed

FRI Bulletins

No. 164 Application of FOLPI: A linear programming estate modelling system for forest management planning.

Manley B., Papps S., Threadgill J., Wakelin S. (1991) \$10.00+GST FOLPI has been used over the last six years for forest management planning, log allocation, and forest valuation. It has been used to model estates at the forest, regional, and national/corporate levels. The FOLPI modelling system has evolved in response to experience gained during these applications.

No. 166 Environmental constraints on

forest harvesting in the Marlborough Sounds

Murphy G.E., Blundell W.M., Fahey B.D. (1991) \$20.00+GST

The effects of increasing levels of environmental constraints on five variables – net revenue, logging costs, total costs, total sediment yield, and fine sediment yield – were modelled using a paper planning approach. Logging and total costs increased. Net revenue and total and fine sediment yields decreased.

New Zealand Journal of Forestry Science

Variations in nutrient concentrations within *Pinus radiata* trees and their relationship to tree size.

Madgwick H.A.I., Mead D.J. Vol.20(1): 29-38 (1990)

Crown component concentrations and location of nutrients were more highly

(Continued on page 32)

ANZIF CONFERENCE

September 30 – October 5, 1991

This year the NZIF and the Institute of Foresters of Australia will have a combined conference in Christchuch under the theme "New directions in forestry - the costs and benefits of change". The five-day programme involves field trips and a comprehensive technical programme of concurrent sessions spread over two and a half days.

The main programme is as follows:

Tuesday, 2nd October:

AGMs and field trip

Wednesday 3rd:

Session 1: 'Marketing Australian and New Zealand forest products'. Two keynote speakers (I. Ffowcs-Williams and J. Dargavel) followed by five papers on markets, trade and shipping.

Session 2: 'Raw material or added value exporting', R.C. Donelly and K.R. Shepherd are the keynote speakers, followed by eight papers on marketing, radiata pine options and eucalypt options.

Thursday 4th?

Session 3: 'Planning and managing a sustainable environment'. Keynote addresses are by Helen Hughes and R.G. Florence followed by 24 papers on political structures, management systems, and education and training.

Session 4: 'Significant agroforestry developments'. The keynote speaker, W.R. Bentley has a global look at agroforestry and social forestry, before 13 papers on integrative techniques, hardwoods on farms and softwoods on farms. Besides radiata, species covered include macrocarpa, poplars and willows, *Paulownia*, eucalypts and Robinia pseudoacacia.

Friday 5th

A morning session on 'Socially responsible forestry in Australia'. The two Presidents of the AIF (Bob Ellis) and the NZIF (Wink Sutton) give the keynote addresses which are followed by a panel discussion on the whole conference theme and finally, by the closing address.

Field trips involve a half-day 'get-to-know-each-other' BBO lunch and forest walk at Charteris Bay on Banks Peninsula on the Tuesday, another with three options: management of plains forestry (Selwyn Plantation Board and Eyrewell forests), Amberley Seed Orchard, or farm forestry (Peter Smail's) on the Friday, and a final full day travelling by bus/trail to Arthurs Pass National Park and Craigieburn Forest Park on the Saturday.

More details can be obtained on the full or just the technical programme from: ANZIF Committee, Box 31-011, Christchurch, Fax (03) 351-7099. There is still time to register for the conference but those interested should do so as soon as possible please.

In our Contemporaries

(continued)

correlated with diameter than with either total height or height increment. phosphorus nitrogen and decreased and magnesium increased down the crown. Foliar nitrogen and phosphorus decreased and calcium increased with needle age. Branch nitrogen, phosphorus, and potassium decreased and calcium increased with both branch age and stem diameter.

Introduction into New Zealand of Bracon phylacteophagus, a biocontrol agent of Phylacteophaga froggatti, eucalyptus leaf-mining sawfly.

Faulds W. Vol. 20(1):54-64 (1990)

A braconid was imported into New Zealand from Australia to control the introduced sawfly, and difficulties in rearing the parasite in quarantine facilities were overcome. Early results show a very rapid spread of the parasite with up to 98% parasitism and indicate that the sawfly population should be considerably reduced by late summer 1990.

Leaf-inhabiting fungi of eucalypts in New Zealand. II.

Dick M. Vol. 20(1):65-74 (1990)

Eleven species of fungi associated with lesions on leaves of Eucalyptus spp. in New Zealand are reported in their fungal characteristics and host symptoms are described. All except one were initially described in Australia. New host records are listed for six other fungi on Eucalyptus.

Structural root morphology and biomass of three ageclasses of Pinus radiata

Watson A., O'Loughlin C. Vol. 20(1): 97-110 (1990)

The root system of 13 Pinus radiata trees from three age-classes in Mangatu Forest were hydraulically excavated. Each system was drawn in plan and elevation, then dissected and sorted into six diameter-classes for weight and length measurements to obtain information on changes in root biomass and root extension with time.

New Zealand Tree Grower

Joint Forestry Ventures

Buist, Malcolm. Vol. 12(2): 19-21 (1991) This article documents the legal responsibility of each party in a joint venture, and highlights the matters which the landowner/farmer needs to consider. This article was first published in 1984, and has been reproduced in response to the revival of interest in joint ventures.

Walnut tree growth model highlights potential for profit

Parker, Nick. Vol. 12(2): 23-25 (1991) The author has constructed a computer program to simulate the production from a walnut stand, and concludes that walnuts look like being a very profitable option.

Growing Today

The right stuff

Harrison, J. Vernon, Vol. 4(4): 8-9 (1991) The Walnut Action Group (WAG) has had a Label Scheme in operation for five years. Trees that carry the WAG label are the most promising cultivars. The labels scheme also helps provide funds for ongoing research. This article explains how the labels system operates, and gives examples of cultivars currently being certified.

Under the Trees

Mortimer, John. Vol. 4(4): 38-39 (1991)

This article examines the potential of Maku lotus, a NZ developed nitrogen fixer with resistance to grass grub, and porina, and a species ideal for weed control. It was developed for use in farm forestry and the foliage is succulent and attractive to livestock.

New Zealand **Forest Industries**

Rural fire-fighting proposals pose threat to farm foresters

Orwin, Joanna. Vol. 21(6): 24 (1991) This article discusses new legislation proposals under which insurance schemes will not protect woodlot owners from the costs of fighting fires.

Black beech forest farm puts ecological theories into practice

Orwin, Joanna. Vol. 21(6): 51-22 (1991) John and Rosalie Wardle have a 120ha property near Oxford, Canterbury, with half covered in regrowth black beech forest. The Wardles' approach is to manage this forest in accordance with its natural ecological processes.

Terra Nova

Special feature on Sustainable Forestry

In seven specially-written articles, David Young examines the background to the ministerial discussion round on indigenous forestry ("A Standing Order"); Harry Broad looks at the management practices of a couple who grow beech for profit ("Beech Farmers for Love and Money"); Andrew McEwen looks at how the State got into - and out of - the forestry business ("Disposing of the Trees"); Rob Magill looks at helicopter logging on a Hawkes Bay site ("Chopper on the Devil's Elbow"); Joanna Orwin looks at research on sustainable land use ("Forestry: Sustaining the Land"); Peter Simpson looks at efforts to restore native vegetation on the East Coast ("Sowing the Seeds at Tairawhiti"); and David Harding examines an example of permaculture tree cropping ("Putting Permaculture to the Test"). There's also a substantial story on recycled paper in New Zealand, by Peter Taylor.

Southern pine lumber for Korean housing

(continued)

Forestry Corporation of New Zealand Ltd's Asian Marketing Manager, Peter Price, who pioneered the sale of radiata pine to Korea, led a sales team there last September to investigate the opportunities for supplying sawn lumber in commercial volumes.

A trial shipment of sawn Southern pine lumber was sent on board the charter vessel Cedar Forest to the Korean port of Inchon in January. The trial was successful and further contracts have been signed, according to the company's Asian Lumber Sales Manager, Ken Read.

"We have established there is a viable market. Now it is a matter of developing that market so that it can take larger volumes of the Southern pine resource in the Bay of Plenty over the next few years," Mr Read said.

"It is also a more efficient use of the short length logs produced as part of the export cut enabling a high specification of log to be exported and at the same time utilising the fall down grades.'

Southern pine is a lower quality timber than radiata and is not a marketable commodity in New Zealand, but meets all the requirements of the end user in Korea. The only alternative in New Zealand for this species is as a resource for pulp.