Education and Environment Centre: Wellington Botanic Garden

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Education and Environment Centre, an imposing structure within the Wellington Botanic Garden, was officially opened on April 30, 1991. Sir David Attenborough was a guest speaker. The Centre offers unique opportunities for promoting education in horticulture and related matters.

The August 1990 issue of NZ Forestry contains a review of the book, 'The Botanic Garden, Wellington' by Winsome Shepherd and Walter Cook. In it is comment about the early use of the Garden for forestry matters. These included the introduction and distribution of a wide range of conifers; a chapter of the book is devoted to 'Plant Trials - Conifers', and another to 'The Pinetum'. Peter McKelvey in the February 1991 issue of NZ Forestry wrote about Thomas Kirk and his appointment as the first Chief Conservator of Forests. He used the garden for raising and distributing forest trees. The Garden itself came to contain, and still contains, a large collection of conifers, including some of the oldest radiata pine in the country.

One other important connection with forestry was forged through Leonard Cockayne who was instrumental in persuading Wellington City to acquire the remnant area of native forest known as Otari Plant Reserve. The Garden and the Reserve are now amalgamated administratively - an important development.

Part of the Garden was originally in the Town Belt, an area of about 600 ha set aside as a Crown Reserve and later coming under the Wellington council. A chapter in the above book, 'The Council Estate: An Apprenticeship in Plantation Management, deals with tree planting on the Town Belt, beginning in the 1870s. The future of the Belt is now being reviewed.

The Centre is likely to be used at first for mainly horticultural tuition. The demand is there, the expertise is there and the surrounding Garden and Otari are living laboratories.

But so are the trees there. The combination of Garden, Centre, Town Belt, and Otari should offer a grand opportunity for tuition and trials on the elements of forestry.

A link that is being forged at present is the closer relationship between horticulture and arboriculture - membership of includes full membership of the Royal NZ Institute of Horticulture. Arboriculture is only a few steps away from forestry. And not much further away - or is it closer? - is landscape architecture when trees and forests are part of the scene.

the NZ Arboricultural Association now

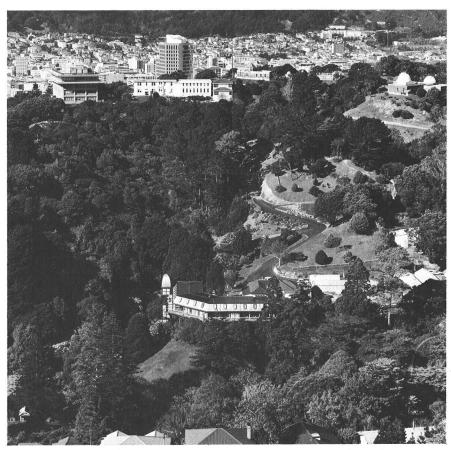
One clear need of forestry, in the face of recent shattering manoeuvres, is to educate the public in simple, basic forestry. Public support is essential if sound, long-term forest policies are to be developed. The Ministry of Forestry is facing up to this need and reports as follows: "The Ministry in joint project with FITEC (the fledging Forestry Industry Training and Educational Council) and "Learning Media" (the part of the Ministry of Education concerned with the production and distribution of school learning materials) is planning to produce a wide range of forestry

educational materials which will support school curricula from the junior school through to the seventh form. In addition, the Ministry is plugging the huge public information gap on the multi benefits of forestry and encouraging greater investment." (John Handiside, Asst. Sec. Forestry Services)

The Education and Environment Centre is one place, an ideal place, where a small start can be made. A plan for its use contains:

The Garden Management Plan 1990

In 1990 a Wellington Botanic Garden Management Plan was drawn up by the Parks and Reserves Department of the Wellington City Council. (Jan. 1990 P. 32) The plan contains the following: Page 25. "A comprehensive education centre shall be developed as part of the Wellington City Council's centenary of management of the Garden in 1991.



The Education and Environment Centre (lower centre) strategically placed in the Wellington Botanic Garden. It is one of the developments to mark 100 years' administration of the Garden by the Wellington City. Part of the city can be seen beyond the Garden. The Carter Observatory, Kelburn, is near the upper right. A number of conifer species are present throughout the tree vegetation. - Photo: J.H.G. Johns.

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"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

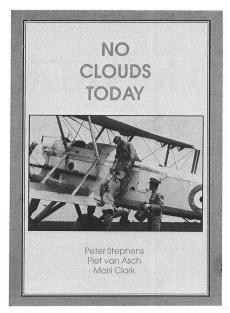
These are set out on page 15 of the Management Plan. They contain:

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)