

# In our Contemporaries

## NZ Journal Of Ecology

### PHYSICAL INFLUENCES ON FOREST TYPES AND DEER HABITAT, NORTHERN FIORDLAND, NEW ZEALAND

Stewart G.H., Harrison J.B.J. 10: 1-10 (1987).

Deer distribution largely reflects food preferences and availability. This paper relates use of specific forest types in Fiordland by deer to the underlying physical environment to determine whether landform type or stage in soil development can be used to predict areas of high deer use.

\*\*\*\*\*

### RECOVERY OF NORTHERN FIORDLAND ALPINE GRASSLANDS AFTER REDUCTION IN THE DEER POPULATION

Rose A.B., Platt K.H. 10: 23-33 (1987).

Remeasurement of permanent plots in Fiordland alpine grassland enabled assessment of recovery patterns in the vegetation after 11 years of intensive aerial hunting of red deer and wapiti. As the area is the one favoured for re-introduction of the rare takahe, the recovery of foods preferred by this bird was assessed, and the implications of takahe management are discussed.

\*\*\*\*\*

### FOREST UNDERSTOREY CHANGES AFTER REDUCTION IN DEER NUMBERS, NORTHERN FIORDLAND, NEW ZEALAND

Stewart G.H., Wardle J.A., Burrows L.E., 10: 35-42 (1987).

Monitoring of forest composition in geographically similar areas with different histories of deer occupation has enabled assessment of animal impact on forest understoreys in Fiordland since the 1960s. This paper describes changes in forest structure and composition after

reduction in animal numbers in the 1970s, determines which changes are attributable to these reductions, and identifies which forest types are still vulnerable.

\*\*\*\*\*

### CHANGES IN THE DENSITY AND DISTRIBUTION OF RED DEER AND WAPITI IN NORTHERN FIORDLAND

Nugent G., Parkes J.P., Tustin K.G. 10: 11-21 (1987).

FRI staff surveyed north Fiordland in 1969, 1975, and 1984. This paper describes changes in deer density and distribution between surveys, relationships of deer with habitat (1984), the effects of hunting pressure, and the extent of cross-breeding between wapiti and red deer.

\*\*\*\*\*

## Forest Industries Engineering Association of New Zealand

### SAWMILL IMPROVEMENT

Cown D.J. Forest Industries Engineering Association of New Zealand Inc. Annual Conference, November 1985.

Increasing log prices and labour rates around the world have led to the development of sophisticated methods for the measurement and breakdown of sawlogs at ever-increasing production levels. However, owing to varying log characteristics and markets, different regions have tended to give different emphases to aspects of sawmilling.

\*\*\*\*\*

## Commercial Horticulture

### NEW PINE STRAINS ENTER THE WAR ON NEEDLE BLIGHT

Carson S., Carson M. 19(1): 19 (1987). Dothistroma needle blight is reducing growth over large areas of radiata pine forests in New Zealand. This paper sum-

marizes the efforts of the Forest Research Institute to breed pines resistant to the disease.

\*\*\*\*\*

## NZ Tree Grower

### RADIATA PINE WOOD DENSITY – IMPLICATIONS FOR GROWERS AND PROCESSORS

Maclaren P. 9(2): 41-43 (1988).

Forest location and position of the wood in the tree are as important as rotation length in determining wood density. For example, 15-year-old trees from Northland average the same density as 45-year-old trees from Southland. Anxiety about the density of new-crop radiata pine should be tempered by model calculations that put the question of density in perspective.

\*\*\*\*\*

### PLANTING TO RESTORE OR EXTEND NATIVE FOREST REMNANTS

Bergin D., Pardy G., Beveridge A.E. 9(2): 44-47 (1988).

Almost 30 years ago, some 30,000 native conifer seedlings were planted in trials on the Mamaku Plateau to "enrich" partially logged native forest. These early FRI trials have provided valuable insights into restoring native forest on difficult sites. Recent trials have refined planting techniques and investigated use of native hardwood species on lowland sites. Guidelines are provided for the landowner wishing to restore degraded native forest remnants or extend native forest to open sites.

\*\*\*\*\*

## FRI Bulletins

No. 12

### PREDICTING 'DIAMETER-OVER- STUBS' IN PRUNED STANDS OF RADIATA PINE

Knowles R.L., West G.G., Koehler A.R. (1987).

The relationship between maximum "diameter-over-stubs" (DOS) and other

tree variables was investigated for pruned stands of radiata pine throughout New Zealand. The study showed that a single equation is adequate to predict mean stand DOS for any section of the stem from 0 to 11m, for all forests and a wide range of silvicultural regimes.

\*\*\*\*\*

**No. 128**

**PROCEEDINGS OF THE  
CONVERSION PLANNING  
CONFERENCE**

**Kininmonth J.A. (1987) (Comp.)**

The original objectives of the Conversion Planning Project Team are outlined, along with the problems encountered in carrying out the research, and the final development of an integrated Conversion Planning Model System. The integrated Model System has been designed to help address the problems facing the New Zealand forestry sector.

\*\*\*\*\*

**No. 129**

**FURTHER  
DEVELOPMENTS AND  
VALIDATION OF THE  
EARLY GROWTH  
MODEL**

**West G.G., Eggleston N.J., McLanachan J. (1987)**

Developments to the EARLY growth model include a low basal area function, scheduling pruning to a target DOS, and other utility improvements. The appropriate basal area function was determined for several forests. Over a wide range of sites and silvicultural regimes the overall model error was found to be  $\pm 15\%$ .

\*\*\*\*\*

**No. 131**

**EQUATIONS FOR  
PREDICTING DEFECT  
CORE SIZES FOR  
PRUNED RADIATA PINE  
BUTT LOGS**

**Gosnell T. (1987)**

Analyses were carried out on the results from sawing a wide range of swept, pruned, radiata pine, 5.5m butt logs. Equations were developed to predict diameter over occlusion (DOO), log defect core size, and partial defect core size.

**No. 132**

**STAND ASSESSMENT BY  
LOG GRADES USING  
MARVL**

**Manley B.R., Goulding C.J., Lawrence M.E. (1987)**

A cruising decision-tree, to be used with the MARVL pre-harvest inventory method, has been developed for consistent assessment of stands in terms of proposed log grades. The procedure has been successfully tested in stands in Kaingaroa and Golden Downs Forests.

\*\*\*\*\*

**No. 133**

**A MANUAL FOR  
SELECTING CROP TREES  
WHEN PRUNING AND  
THINNING RADIATA  
PINE**

**Maclaren P. (1987)**

This booklet describes the reasons for pruning and thinning radiata pine in New Zealand, how to determine the timing and intensity of pruning and thinning, and the criteria for selecting crop trees.

\*\*\*\*\*

**No. 134**

**CERTIFICATION SYSTEM  
FOR FOREST TREE SEED  
AND PLANTING STOCK**

**Vincent, T.G. (1987)**

This bulletin details a voluntary scheme for tree seed and certification in three categories: *Pinus radiata*, Other Exotic Species, and Native Species. *Pinus radiata* is certified by Breed Code and Improvement Rating; provenance is the major characteristic for Other Exotic and Native Species. (17 p.)

\*\*\*\*\*

**No. 138**

**SAMPLING AND  
MEASURING  
PROCEDURE FOR TREE  
VOLUME AND TAPER  
EQUATION  
CONSTRUCTION AND  
TESTING**

**Gordon A., Penman J. (1987)**

This manual contains detailed instructions for planning and executing a sample survey (inventory) of tree volume and taper. The resulting sectional measurement data can be used to text existing tree volume and taper equations, and to derive new ones.

**What's new in Forest  
Research**

**No.144** Effects of commercial hunting on red deer populations

**No.145** Computers in the forest

**No.146** Beech management – Its effects on bird populations

**No.147** Toppling of radiata pine

**No.148** Impact of rising levels of atmospheric CO<sub>2</sub> on New Zealand's forests

**No.149** Reforestation after fire in Canterbury beech forests

**No.150** Replacing pampas grass – Alternative species for low shelter and amenity plantings

**No.151** New Zealand's indigenous grasslands

**No.152** Feral goat control

**No.153** Management prospects for tawa

**No.154** WATMOD – A means of predicting water use by forests

**No.155** Eucalypts – Selecting high-quality crop trees

**No.156** Exclosures – A means of assessing the impact of browsing animals on native forests

**No.157** Which radiata pine seed should you use?

**No.158** Raising native trees and shrubs from seed

**Book Reviews – continued**

in the format to Working Paper 3.3, therefore, will need to be widened considerably, as indicated earlier here, if this country is to put right the assessment made by Leslie (1986) in Working Paper No. 9 of the New Zealand Forestry Council, that

“Forestry sector planning is almost non-existent in New Zealand. There is plenty of planning within the sector but hardly any of it encompasses the sector as a whole and it is all taking place in a vacuum”, having “little to do with what goes on at the top and little more to do with what actually happens in the field.”

What is the future for successive annual revisions of the National Exotic Forest Description? There is little doubt that the compilation of data should continue annually and that much value would accrue from having a wider range of information. But serious sector study researchers will need access to more comprehensive and disaggregated annually updated data while those with a less specialized interest are likely to refer to a summary report such as this Working Paper No. 3.3 (priced at \$27.50) without the need for the same frequency of revisions. The Ministry of Forestry may have an obligation to direct contributors; but one wonders who else will continue to be satisfied with this particular format.

**A.G.D. Whyte**