

# Rayonier intends to build processing plant in Southland

Rayonier New Zealand (RNZ) has stated it intends to build a world-class Medium Density Fibreboard (MDF) facility in Southland to support rapidly growing Pacific Rim export markets.

Charles Margiotta, Managing Director of RNZ, said site selection was underway and discussions were being held with possible joint venture partners. It is expected the facility would produce about 100,000 cubic metres of MDF and cost between \$100-120 million. Start-up is targeted for early to mid-1996, pending necessary permitting and crown approval.

RNZ started operating in New Zealand in 1988, and in 1992 the company purchased 100,000 hectares of crown plantation forests, of which 33,000 hectares are within the Southland/Otago region. The mill will significantly improve utilisation and value of pulpwood from Rayonier's timber estate and that of other forest owners as well. It will also provide local demand for chips being produced by Southland/Otago sawmills.

The plant will be Rayonier's first venture into one of the fastest-growing segments of the engineered-wood business.

Because of its light colour, MDF produced from radiata pine is in high demand throughout the world for furniture, cabinetry and millwork.

Rayonier New Zealand is a wholly-owned subsidiary of Rayonier, a leading international forest products company headquartered in the United States with customers in more than 60 countries.

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## Consultant recognition

The following have applied for recognition as specialist forestry consultants in New Zealand and overseas:

**Robin Trewin** Rotorua  
**Michael Krausse** Palmerston North

The following specialist consultants have applied for a review of recognition as general forestry consultants:

**Jon Dey** Wellington  
**John Schrider** Wellington

Under the NZIF constitution, any members of the Institute may send objections in writing within 40 days of Journal publication to the Registrar, NZIF Consultants Committee, P.O. Box 1340, Rotorua.



## An ecological champion questioned

Sir,

Dr Christopher Thies (J'Accuse, *NZ Forestry* 39:1, p 6), like so many environmentalists, seems to be ecologically illiterate. I shall deal with only one solecism.

He states: "This means no clear-cuts, which are unknown in the forest's natural processes." He is unaware that, before the advent of humans, much of the forests of temperate and boreal zones were regenerated by catastrophes. In his thinking humans are not legitimately involved in ecosystems. If they were, by chance, then it would be just as natural for humans to clear-cut forests as for wildfires, gales, floods, volcanic eruptions, insect and fungal epidemics to destroy them. Further, is there any difference between humans planting or seeding previously tree-bearing land, and haphazard and irregular regeneration through the agency of wind or birds?

Is he aware that Finland and Germany were once almost totally denuded of trees, and their present well-forested state is due almost entirely to people replanting the forests?

Moreover, why doesn't Dr Thies, to be consistent, apply his strictures to grain-bearing grasses, vegetables, fruits and nuts? That way we could all become extinct, and cataclysmic climatic and tectonic events could clearfell forests to their hearts' content.

**C.G.R. Chavasse**

## Ure v Richardson

Sir,

I am enjoying the sparring between the above named. Despite clever footwork by Dennis in trying to get out of John's corner I think John is clearly ahead on points. His technical superiority is evident from Dennis having to ask in the May issue "What is SCHLEICHWIRTSCHAFT?" I am assuming that Dennis is not covering up behind an obvious misprint.

Those of us who were nurtured in European forest management with Dr R.S. Troup's standard textbook "Silvicultural Systems" to hand will have little difficulty in recalling the English translation of SCHLEICHWIRTSCHAFT, simply "selection system". I suspect that Dennis

would have had less of a problem had John used the French equivalent JARDINAGE, in as much as there is indeed something garden-like on a grand scale in the Redwood Grove.

**Malcolm Conway**

## Croatian request for employment

The Journal recently received a CV and request for employment from a Croatian forester, currently a New Zealand permanent resident. For those interested in contacting him his details are as follows:

Mr Nevesin Kovacic  
7D Hampton Court  
182 Federal Street  
Auckland  
Tel: 09-377 3976

**Ed.**

## Forest valuation

Sir,

J.E. Henry illustrates a problem in forest accounting in his letter in the May 1944 issue. I agree that investors are entitled to annual accounting of their forest values. I would add that the accounting should be done using consistent and recognised accounting procedures. Mr Henry makes a good point. Unfortunately, he uses misleading logic in making his point. He ignores the time value of money.

Mr Henry takes the value of a forest crop harvested at age 25 and adds it to the value of a subsequent forest harvested at age 20. He argues that the resulting sum is less than the value of the first crop, had it been allowed to grow on to age 46. In doing this, all Mr Henry is saying is that the value of a 46-year-old forest is higher than the value of two forests, aged 25 and 20. He is implying that the trees should be allowed to grow older. But he is ignoring the cost of allowing them to do so. He is implicitly assuming that his discount rate is 0 per cent.

If the forest crop is felled at age 25, the proceeds from the sale could probably be invested at a positive rate of return. If nothing else, they could be reinvested in forestry. It is not correct to add money now to money earned 20 years from now, unless you are an accountant using historic cost valuation or you are an investor whose best alternative is to stuff a mattress with the cash. Yet that is what Mr Henry does.

One of the reasons that accountants have been so reluctant to take on forestry

# Dutch Elm Disease appears 'in remission'

is that there are difficult issues in valuation (notably future prices, costs, and the appropriate discount rate). Accountants are comfortable with transactions evidence. There is no evidence regarding the future, which is why historic cost still is accepted for forest valuation purposes. This valuation technique often creates huge forest management problems when financiers discover "undervalued" forest assets.

However, if one accepts that money now is better than money later, then future values must be discounted in order to make them comparable. Using Mr Henry's figures, a positive discount rate, and the land expectation value, gives significantly different management implications. These are shown (Table 1). A discount rate of zero gives an infinite land expectation value. Raising the discount rate tends to shorten the rotation age.

This is a simplistic valuation. It does not take into account the cost of establishment or of any risk to the investment. Similarly, it does not take into account any other benefits associated with forest growing. The only thing considered is final crop revenue and the investor's time value of money. However, if the investor wishes to get the most forest for his/her money, then this is the type of methodology that ought to be used to account for the forest value. And an investor will probably be better off by felling well before age 46 and investing in additional

Only 11 new locations of Dutch Elm Disease were discovered this season – half the number found last year, according to John Handiside, General Manager, Protection Operations, Ministry of Forestry.

"One of those new locations was in Napier and we are pleased to be able to announce that the outbreak has been contained. We are rescinding the Declaration of an Infected Area we were forced to impose on Napier city at Christmas," said Mr Handiside.

"This was made possible by the immense support and help from the Napier City Council and citizens in the reporting of elm locations, debris and suspected cases of the disease," he said.

A declaration of infection was however still in place for the four Auckland cities where the remaining 10 infestations were found.

"Success in reducing the number of cases found around Auckland was largely due to the four city councils supporting a major survey which located 12,000 elms in the area and three checks of each tree during the November to March season for symptoms of the disease.

"We also have the public to thank for their prompt reporting of elm debris and 'sick trees' and ask for their continued vigilance. We now have a chance of eradicating this disease once and for all," said Mr Handiside.

forests, rather than waiting until the original investment is returning less than 2 per cent.

Investors are entitled to a report containing a good annual accounting of both the management and change in value of their forest investments. They should also have an outline of management intentions and the rationale underlying their recommendations. Mr Henry makes many good points on what such a report should contain. It is ironic that in lambasting financiers and accountants, he ignores the first

principles of forest valuation, principles that a forester invented (Faustmann, 1849).

## E.M. Bilek

*Faustmann, M. 1849. Berechnung des Werthes, welchen Waldboden, sowie noch nicht haubare Holzbestände für de Waldwirtschaft besitzen. (Calculation of Values for Forest Land and for Immature Stands Used for Timber Production). Allgemeine Forst-und Jagd Zeitung. 25. pp 441-455.*

**Table 1. New Zealand Radiata Pine Generalised Yield Table**

Yield table and prices from: Henry, J.E. 1994. "Forest Valuation." New Zealand Forestry. (May). 39(1): 14-15.													
Sales Value On Stump		Discount Rate		6.5%		Financial Summary							
Product	\$/m <sup>3</sup>						Maximum	Optimum					
Pruned logs	\$425						Return	Rotation					
Unpruned logs A	\$220						NPV	\$17,682	20	years			
Unpruned logs B	\$190						LEV	\$24,106	20	years			
Unpruned logs C	\$160												
Pulpwood	\$80												
Sensitivity Analysis													
Discount Rate													
							0.0001%	2%	4%	6%	8%	10%	
							Maximum LEV	\$4,300,149,941	\$144,634	\$51,890	\$27,653	\$16,450	\$11,122
							Optimum Rotation	41	31	20	20	20	10
Yields per hectare													
Age	Total Recov.								Annual	PV of 1st	LEV of		
	Volume	Pruned	Unpruned A	Unpruned B	Unpruned C	Pulpwood	Value	Percent	Rotation	Rotation	Rotation		
	m l.b/ha	m l.b/ha	m l.b/ha	m l.b/ha	m l.b/ha	m l.b/ha	\$/ha	Increase	\$/ha	\$/ha	\$/ha		
10	108	18	11	10	38	32	20,610		10,309	20,628			
15	211	34	21	19	74	63	39,560	13.9%	14,443	22,749			
20	353	57	36	31	124	106	66,355	10.9%	17,682	24,106			
25	480	77	48	43	167	143	89,615	6.2%	17,430	21,638			
30	611	109	86	88	165	164	121,485	6.3%	17,246	20,099			
31	636	115	93	100	166	163	127,935	5.3%	17,053	19,676			
35	727	133	121	148	165	159	150,385	4.1%	15,582	17,383			
36	748	137	128	160	166	156	155,825	3.6%	15,160	16,794			
40	825	151	159	208	159	149	176,035	3.1%	13,313	14,402			
41	842	154	164	220	160	146	180,610	2.6%	12,825	13,805			
45	905	169	181	258	157	140	196,985	2.2%	10,873	11,508			
46	916	172	183	264	157	140	199,840	1.4%	10,357	10,924			