







NEW ZEALAND FOREST INDUSTRY FACTS & FIGURES

2004/2005

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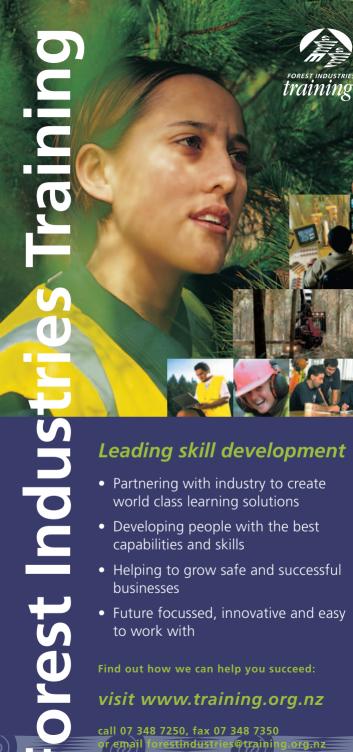
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AKORANGA MO TEWAOTU

NZ Plantation Forestry In Summary

Area & standing volume statistics	April 2002	April 2003
Net stocked forest area (ha)		
Total estimated area	1,814,000	1,827,000
Growth characteristics		
Standing volume (000m³)	390,000	398,000
Average standing volume (m³/ha)	215	218
Area-weighted average age (years)	13.6	13.7
Area by species (ha)		
Radiata pine	1,622,000	1,630,000
Douglas-fir	104,000	109,000
Other exotic softwoods	34,000	33,000
All exotic hardwoods	54,000	55,000
Radiata pine area by tending regime (ha)		
Pruned with production thinning	276,000	274,000
Pruned without production thinning	810,000	818,000
Unpruned with production thinning	63,000	62,000
Unpruned without production thinning	473,000	476,000
	Year Ended	Year Ended
Dionting 9 howeasting statistics	31 December 2002	
3	31 December 2002	31 December 2003
New planting (ha)		
Total estimated new planting	30,100	22,100
Restocking	35,800	39,600
Harvested area awaiting restocking	41,600	49,500
Harvesting	31 March 2002	31 March 2003
Area clear felled (ha)	42,000	49,000
Volume clear felled (TRVIB¹, 000m³)	19,355	22,206
Volume production thinned (TRVIB, 000m³)	771	772
Total volume removed (TRVIB, 000m³)	20,126	22,978
Average clear fell yield (m³/ha)	465	454
Area-weighted average clear fell age for radiata pi	ine (years) 27.4	27.3
Estimated planted forest roundwood removals based upon main products recovered (000m³)²	20,880	22,410

Notes:

Source: NEFD 2003

r = revised

Unless stated, all information contained in this booklet has been sourced from the New Zealand Ministry of Agriculture and Forestry.

¹ TRVIB is an abbreviation for Total Recoverable Volume Inside Bark.

 $^{^{2}}$ This is an estimate based upon the application of product recovery conversion factors to the main products made from the forest harvest.

NZ Economic Indicators – 2003/04

Population	4,061,000
GDP \$ million	126.3
GDP per capita \$	31,564
Exports \$ million	29,851
Forest products exports total \$ million	3.2
Total overseas debt \$ billion	138.047
Annual percentage change in GDP	3.4%
Inflation (as measured by annual percentage change in CPI)	2.4%
Forestry sector contribution to GDP	3.4%

Source: Statistics New Zealand

New Zealand Land Use

(Total area of New Zealand 26.9 million hectares)



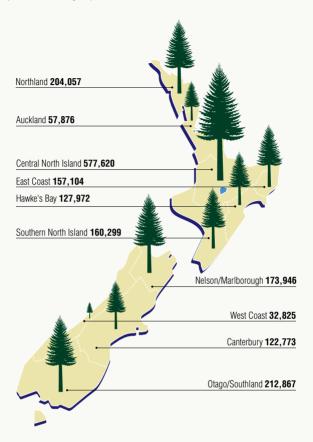
	Hectares (millions)	% of total
Pasture & arable land	11.8	44%
Natural forest	6.2	23%
Other non-forested land	7.1	26%
Plantation forest	1.8	7%

Notes:

Total area is at mean high tide mark on 21 September 2001

Where The Plantation Forests Are

(Hectares - round figures)



Total 1.8 million hectares

Source: NEFD 2003

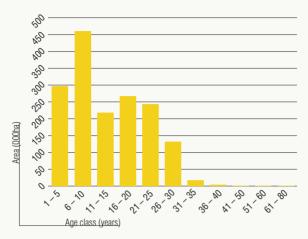
Plantation Forest Area By Species

(As at 1 April 2003)

	Hectares (thousands)	% of total
Radiata pine	1,630	89.2
Douglas-fir	109	6.0
Other exotic softwoods	33	1.8
All exotic hardwoods	55	3.0
Total	1,827	100

Net Stocked Area Of Radiata Pine

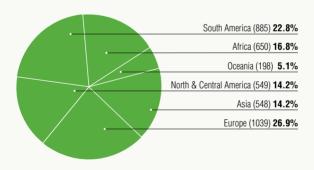
(By age class at 1 April 2003)



Source: NEFD 2003

Global Forest Areas By Main Regions (2000)

(Millions hectares)

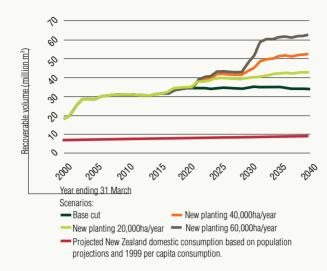


2000: total area = 3869 million ha Source: FAO State of World Forests 2000

Did you know that:

New Zealand's forest industry supplies 1.1% of world and 8.8% of Asia Pacific's forest products trade. All from just 0.05% of the world's forest resource and an annual harvest area equivalent to 0.0009% of global forest cover. The reason – highly productive, sustainably managed plantation forests.

Wood Availability Forecast



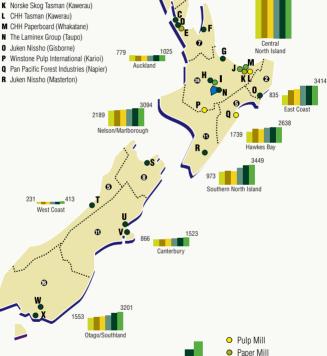
New Zealand Planted Forest Ownership

Owner/Manager	Planted Area (ha) – round figures	% of Total
Carter Holt Harvey	315,000	17.2
Kaingaroa Timberlands	165,000	9.0
PruTimber	66,000	3.6
Weyerhaeuser New Zealand	64,000	3.5
Ernslaw One	56,000	3.1
Juken Nissho	55,000	3.0
Rayonier New Zealand	50,000	2.7
Crown Forestry	42,000	2.3
Hancock Natural Resource Group	41,000	2.2
Pan Pac Forest Products	32,000	1.7
Blakely Pacific	28,000	1.5
Global Forest Partners ¹	27,000	1.5
Hikurangi Forest Farms	27,000	1.5
Timberlands West Coast	27,000	1.5
Wenita Forest Products	25,000	1.4
Roger Dickie New Zealand	24,000	1.3
Forest Enterprises	22,000	1.2
Evergreen Forests	21,000	1.1
Winstone Pulp International	17,000	0.9
GMO Renewable Resources	15,000	0.8
City Forests	15,000	0.8
GSL Capital	11,000	0.6
Other (Includes Farm Forestry)	682,000	37.4
Total	1,827,000	100

In addition to the 27,000 hectares of forest Global Forest Partners have full ownership of they have financial interests in a range of New Zealand forestry investments including joint venture interests in Mangakahia Forest with CHH and the forests managed by Weyerheauser XP Line in the Nelson regions.

Location Of Major Forest Industries and Expected Woodflows by Wood Supply Region

- A Juken Nissho (Kaitaia)
- B CHH Futurebuild (Whangarei)
- C Tenon Wood Panels (Kumeu)
- D The Laminex Group (Penrose)
- E CHH Paperboard (Penrose)
- F CHH Pinepanels (Thames)
- G Tenon Limited Plywood (Mt Maunganui)
- H CHH Engineered Wood Products (Tokoroa)
- CHH Kinleith (Kinleith Mill)
- J SCI Hygiene Australasia (Kawerau)



- S Nelson Pine Industries (Richmond)
- T International Panel & Lumber (Greymouth)
- U CHH Pinepanels (Rangiora)
- V Gunn's New Zealand Pty (Christchurch)
- W Rayonier New Zealand MDF (Mataura)
- X Southland Veneers (Invercargill)
- per annum (000m² (base-cut scenario)

4058

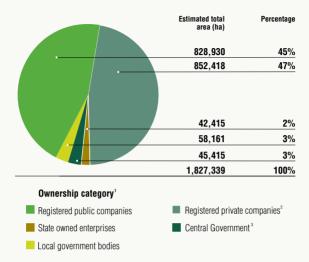
11282

11682

- Pulp & Paper
- Panel Board Mill
- Number of sawmills producing 5000m3 or more of sawn timber in the year ended 31/3/03

Plantation Forest Ownership

(Net stocked planted production forest area at 1 April 2003)

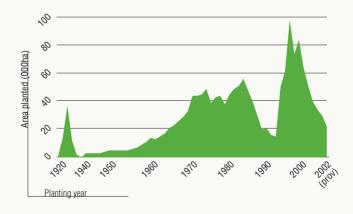


Note:

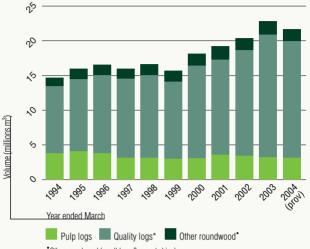
- 1. Ownership is based solely on the ownership of the forest irrespective of the ownership of the land.
- "Privately owned" includes all privately owned forests. The legal entities included in this category are private companies, partnerships, individuals and trusts, which include Maori trusts and incorporations.
- "Central Government" forests are predominantly Crown owned forests on Maori lease hold land. These forests are managed by the Ministry of Agriculture and Forestry.

Rates Of New Planting

(In addition to restocking)



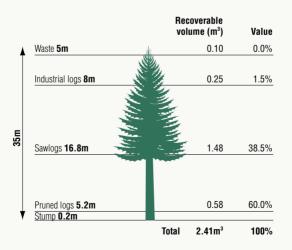
Plantation Forest Harvest



^{*}Other roundwood (small logs & export chips)

Typical Log Out-turn

(Radiata pine age 27 from direct sawlog regime)

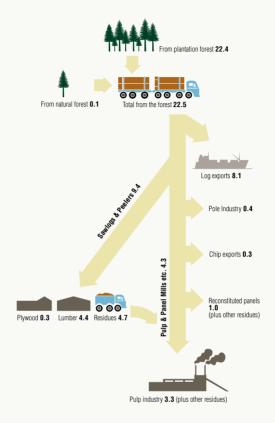


Source: NZFOA

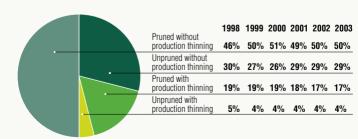
^{*}Quality logs (saw logs, peeler logs, export logs)

Log Flow In The New Zealand Forestry Industry

(Volumes in millions m³ roundwood equivalent. Year ended 31 March 2003).

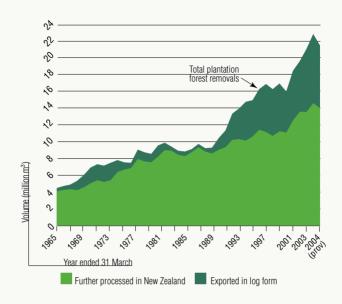


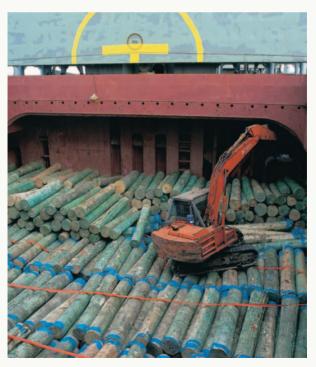
Forest Management Trends - Radiata Pine



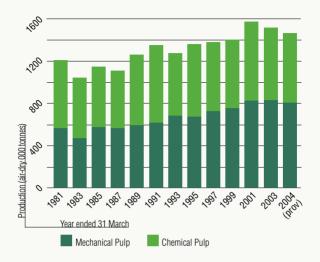
Source: NEFD April 2003

Where The Log Harvest Goes

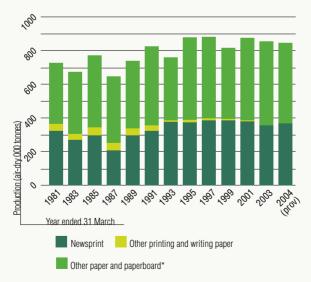




Wood Pulp Production



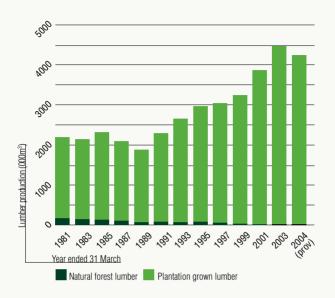
Paper And Paperboard Production



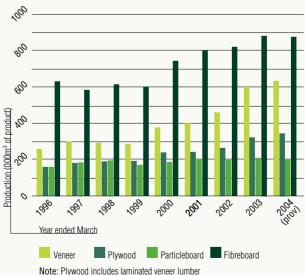
^{*} All other paper and paperboard includes household and sanitary papers, packaging paper & paperboard.

NB. Other printing and writing paper no longer produced in New Zealand.

Lumber Production



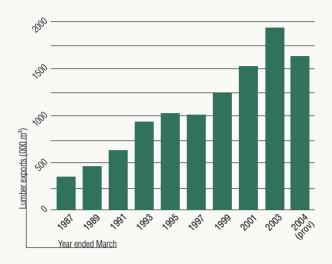
Panel Products Production



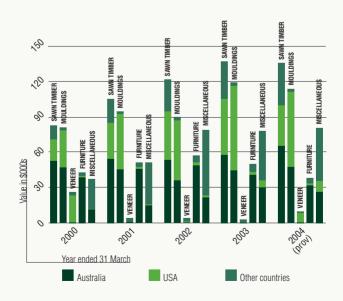
Fibreboard includes MDF, triboard, hardboard & softboard.

Source: NZPMA

New Zealand Lumber Exports

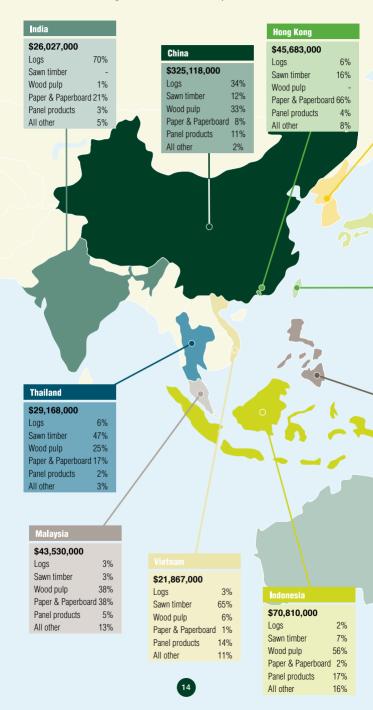


Exports of Forestry Products from New Zealand By Country ("Value Added")



Top Export Destinations

Year ended March 2004 (provisional - values in NZ\$ f.o.b.)



\$425,808,000

Logs 80% 2% Sawn timber 12% Wood pulp Paper & Paperboard 3% Panel products 3% All other

\$618,824,000

Logs 20% Sawn timber 11% Wood pulp 13% Paper & Paperboard 44% Panel products All other 12%

USA

\$352,752,000

Logs Sawn timber 62% Wood pulp 2% Paper & Paperboard 1% Panel products 9% All other 26%

Other Countries

\$128,083,000

Paper & Paperboard 26% Panel products

Sawn timber

Wood pulp

All other

2%

22%

6%

10%

34%

Loas

Taiwan

\$61,401,000

Logs 18% Sawn timber 38% Wood pulp 29% Paper & Paperboard 6% Panel products 8% All other 1%

Philippines

\$85,050,000

11% Logs Sawn timber 15% 1% Wood pulp Paper & Paperboard 23% Panel products 48% All other 2%

Australia

\$883,043,000

Logs Sawn timber 27% Wood pulp 10% Paper & Paperboard 29% Panel products 9% All other 25%



Production And Exports Of Selected Forestry Products

(Year ended 31 March 2004 - provisional)

	Total production	Directly exported	Percentage exported	Export Value (NZ \$ m f.o.b.)
Logs (000m³)	21,101	7,314	34.7	624
Lumber (000m³)	4,212	1,624	38.6	684
Fibreboard (m³)	876,586	670,835	76.5	223
Particleboard (m³)	197,263	102,785	52.1	64
Plywood (m³)	345,425	106,036	30.7	151
Chemical pulp (tonnes)	654,291	386,161	59.0	282
Mechanical pulp (tonnes)	808,096	325,558	40.3	141
Newsprint (tonnes)	368,421	195,909	53.2	218
Other paper & paperboard (tonnes)	475,580	263,382	55.4	194

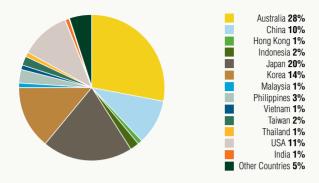
Value of Exports By Product And Destination

(Year ended 31 March 2004 – provisional. Values in NZ\$000 f.o.b.)

Country of Destination	Logs & poles	Lumber	Wood pulp	Paper & paper- board	Panel products	All other forestry products	All forestry products
Australia	179	242,023	86,162	252,115	76,652	225,912	883,043
Japan	125,779	68,598	78,921	1,104	269,600	74,822	618,824
Korea, Republic	338,800	8,690	51,136	12,640	13,878	664	425,808
USA	994	218,653	7,656	2,998	33,488	88,963	352,752
China	109,719	39,360	107,980	26,463	36,300	5,296	325,118
Philippines	9,062	13,151	1,106	19,928	40,414	1,389	85,050
Indonesia	1,081	4,824	39,953	1,457	11,845	11,650	70,810
Taiwan	11,133	23,289	17,543	3,657	4,897	882	61,401
Hong Kong	2,788	7,143	-	30,130	1,934	3,688	45,683
Malaysia	1,477	1,172	16,538	16,500	2,307	5,536	43,530
Thailand	1,847	13,832	7,215	4,870	593	811	29,168
India	18,093	43	208	5,490	894	1,299	26,027
Vietnam	638	14,124	1,368	158	3,104	2,475	21,867
Fiji	-	67	-	8,148	1,216	9,472	18,903
New Caledonia	518	4,199	-	4,152	859	2,048	11,776
Singapore	-	1,798	-	7,858	653	1,247	11,556
French Polynesia	41	4,062	-	3,284	1,086	2,042	10,515
Other countries	2,047	18,518	7,264	10,443	8,839	28,222	75,333
Total	624,196	683,546	423,050	411,395	508,560	466,418	3,117,165

Export Destinations of Forestry Products

(Year ended 31 March 2004 - provisional)



Forestry Exports Summary

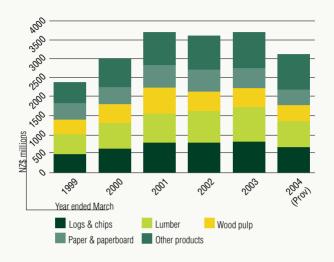
(Year ended 31 March 2004 - provisional)

Forestry Product:	Qty	2002 Value (\$mil)	Qty	2003 Value (\$mil)	2004 Qty	(prov) Value (\$mil)
Logs and poles (000,000m³)	7	714	8	745	7	624
Wood chips (BDU 000m³)	386	77	387	65	313	43
Sawn timber (000,000m³)	2	826	2	920	2	684
Chemical pulp (000 tonnes)	436	376	405	340	386	282
Mechanical (000 tonnes)	359	145	366	151	326	141
Newsprint (000 tonnes)	203	255	219	263	196	218
Other paper and paperboard (000 tonnes)	295	313	300	269	263	194
Fibreboard (000m³)	632	292	677	284	671	223
Plywood (000m³)	103	146	103	145	106	151
Veneer (000m³)	37	15	93	55	130	70
Particleboard (000m³)	96	62	94	59	103	64
Manufactures of paper and paperboard	-	117	-	125	-	129
Continuously shaped wood	-	90	-	120	-	114
Wooden furniture and furniture parts	-	57	-	50	-	38
Miscellaneous forestry	-	124	-	121	-	142
All forestry products	-	3,609	-	3,710	-	3,117
Total NZ produce exports	-	31,527	-	29,168	-	27,512
Forestry exports as % of total exports		11.4%		12.7%		11.3%

Note: Source: INFOS database, Statistics New Zealand. Table prepared by Forestry Statistics Section, Ministry of Agriculture and Forestry.

- 1. Values are NZ\$ free on board (f.o.b.) and may include items for which no quantities are given.
- Other paper and paperboard includes all other paper and paperboard exported but not manufactures of paper and paperboard.
- Miscellaneous forestry products includes wood manufactures, cork and cork manufactures, waste paper and prefabricated wooden buildings.
- 4. Because of rounding, figures in this table do not always sum to the stated totals.
- Not available.
- r = revised.

Major Export Earners



Wood Processing Investment

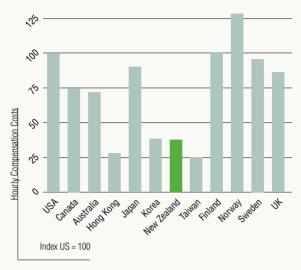
(Publicly announced as at August 2003, values in NZ\$million)

	Solid New Plant	d Wood Pro Plant Upgrades	cessing Total	Residue Processing New Plant Tota Plant Upgrades		sing Total	Total
1000	11.0	0.0	11.0	0.0	0.0	0.0	11.0
1988	11.0	0.0	11.0	0.0	0.0	0.0	11.0
1989	0.0	21.0	21.0	0.0	230.0	230.0	251.0
1990	20.0	0.0	20.0	8.0	50.0	58.0	78.0
1991	0.0	0.0	0.0	0.0	304.6	304.6	304.6
1992	42.0	14.7	56.7	0.0	0.0	0.0	56.7
1993	41.5	41.6	83.1	1.1	8.8	9.9	93.0
1994	49.0	67.2	116.2	0.0	152.0	152.0	268.2
1995	2.0	49.8	51.8	0.0	0.0	0.0	51.8
1996	1.0	4.0	5.0	10.0	58.0	68.0	73.0
1997	13.0	25.4	38.4	120.0	265.0	385.0	423.4
1998	65.4	56.3	121.7	0.0	313.0	313.0	434.7
1999	3.9	4.0	7.9	10.0	0.0	10.0	17.9
2000	0.0	49.0	49.0	4.0	10.0	14.0	63.0
2001	2.0	14.4	16.4	0.0	4.0	4.0	20.4
2002	216.5	83.5	300	0.0	7.7	7.7	307.7
2003-09	347.0	72.5	419.5	0.0	84.5	84.5	504

Note:This summary is not comprehensive. It covers major, publicly announced, one-off investment intentions greater than NZ\$1 million. Actual investments will depend on a number of circumstances.

Source: MAF

International Labour Cost Comparisons 2002



Source: US Bureau Labor Statistics, September 2003

Employment In Forestry And Processing Activities

	Persons engaged as at Mid-February					
	2000	2001	2002	2003		
Forestry	1,780	1,585r	1,565r	1,560		
Logging	3,990	4,700r	4,925r	5,220		
Services to forestry	3,325r	3,630	3,900	4,295		
Total forestry & logging	9,095r	9,915r	10,390r	11,075		
Log sawmilling	7,035r	7,190	7,355r	7,865		
Wood chipping	143r	32r	30r	38		
Timber resawing & dressing	1,380	1,450r	1,610	1,870		
Plywood & veneer manufacturing	1,963r	1,973r	2,165r	1,975		
Fabricated wood manufacture	820r	958r	869r	1,155		
Total pulp, paper &						
paperboard manufacturing	2,883r	2,445r	2,780	2,598		
Total forestry & first stage processing	23,319r	23,963r	25,199r	26,576		

Source: Statistics New Zealand

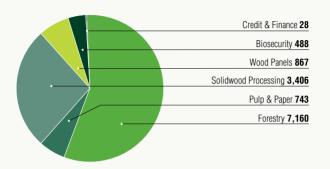
Employment Multipliers: It is estimated that for every full-time job created in forestry and wood processing between 2.2 and 5.8 other jobs are created outside the industry.

Note: Because of changing classification, employment in forestry and processing activities before 1995 is not directly comparable. Because of rounding, figures in this table do not always sum to the stated total. *Some work units that prior to 2001 had been included in wood chipping, have been reclassified and are now included in log sawmilling. This means that a direct comparison between 2001 and previous years cannot be made for these categories.

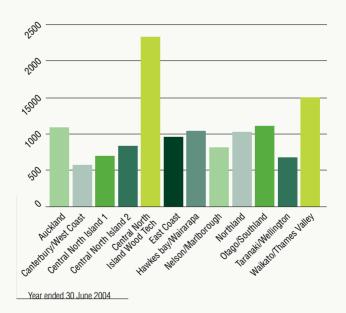
FOREST INDUSTRIES TRAINING

As at June 2004. All material sourced from Forest Industries Training.

Trainees By Sector

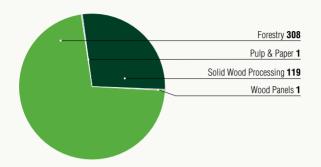


Trainees By Region

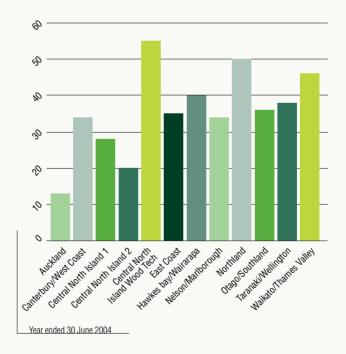


STATISTICS

Modern Apprentices By Sector



Modern Apprentices By Region



Vision 2025 - Development Milestones

2004	2025
\$5 billion outputs	> \$20 billion outputs
4% GDP	> 14% GDP
23,000 employed (100,000 indirectly)	60,000 employed (250,000 indirectly)
\$3.2 billion exports	> \$14 billion exports
3rd largest exporter	Largest exporter
Top 20 global suppliers	Top 5 global suppliers
1.8 million hectares	3.5 – 4 million hectares
20 million m³ harvest	> 40 million m³ harvest
\$100 million supporting technologies industry	\$1 billion supporting technologies industry

Source: NZFIC

New Zealand Forest Accord 1991

The New Zealand Forest Accord is an agreement between conservation groups and most major plantation growers and users to:

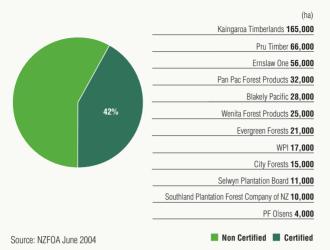
- · define areas unsuitable for forestry;
- acknowledge that existing natural forest should be maintained;
- · recognise commercial forest as essential;
- ensure any use of wood from indigenous forest is on a sustainable, value-added basis;
- ensure new plantation forests will not disturb areas of natural indigenous vegetation.

Principles for Commercial Plantation Forest Management 1995

Environmental excellence in plantation forest management is the primary objective of these Principles. Signed by major plantation growers' associations, users and conservation groups, the parties agree that:

- inter-dependence of ecological, economic and social sustainability must be recognised;
- efficient and effective Principle implementation monitoring is required;
- rural land users should be treated equitably, based on the environmental effects of their activities;
- management practices must meet or improve on all statutory requirements and accepted best practices.

Proportion of NZ's 1.82 million ha plantation certified by FSC



Proportion of NZ's 21million m³ annual harvest certified by FSC

(m3) Kaingaroa Timberlands 3,000,000 Pru Timber 1,000,000 Pan Pac Forest Products 650,000 Wenita Forest Products 360,000 Evergreen Forests 277,000 Ernslaw One 211,000 33% WPI 200,000 City Forests 180,000 Selwyn Plantation Board 160,000 Blakely Pacific 110,000 P F Olsens 45,000 Southland Plantation Forest Company of NZ 25,000 Source: NZFOA June 2004 Non Certified Certified

Recreational Use Of Plantation Forests

Commerce and recreation are compatible partners in New Zealand's planted forests and the majority of forest owners allow public access and recreational activities.

Some of the most popular forest pursuits are:

- · bush walking and tramping
- mountain biking
- · off-road vehicles
- · visiting nature reserves and picnic areas
- hunting
- · horseriding.

In the interests of conservation, fire prevention and safety, there are, however, certain areas that are restricted and require permits. Each company has specific guidelines in this respect and it is advisable to contact local offices/information centres before entering the forest.

Name	Permits (Numbers Issued)	Remnants* (Hectares)
Timberlands	1,234	13,844
Weyerhaeuser	746	6,848
Wenita	3,476	1,462
Carter Holt Harvey Forests	165,042	38,120
Juken Nissho Limited	555	11,200

^{*}Remnants - Unplanted areas retained to protect their natural vegetation.

Note: Other companies and private forest owners provide access to public for a range of recreational activities.



Carbon Sequestration In The Forest

- In 2000, New Zealand's plantation forests absorbed around 25 million tonnes of CO₂ (net of harvesting).
- If the present average new planting rate of more than 30,000 ha per year for the last 10 years is maintained, then it is estimated that over the period 2008 2012 (the first Commitment Period under the provisions of the Kyoto Protocol) NZ's plantation forests planted since the beginning of 1990 will remove more than 105 million tonnes of CO₂ from the atmosphere or 50 million tonnes more than is required to meet our international obligations under the Protocol.
- The value of the 'surplus' carbon absorbed by our plantation forests is more than \$1.250.000.000

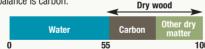
Source: NZ Ministry for the Environment/FOA



Terms And Things

Area & Volume

- A hectare (ha) = 100 x 100 metres (about the size of two rugby fields).
- A cubic metre (m³) = 1metre x 1metre x 1metre (about three times the size of a household dishwasher).
- An average radiata pine tree yields 2.4m³ of wood at harvest.
- 1 hectare of 28 year-old radiata pine contains between 650 and 800 m³ of wood.
- 1 hectare grows up to 28 m3 of wood each year.
- NZ radiata pine plantations yield up to 30% more wood per hectare than they did 60 years ago.
- 1 hectare sequests approximately 25 tonnes CO₂ per year.
- A fresh log contains about 55% water; approximately 50% of the balance is carbon.



Costs & Values

- It costs 15 20 cents to truck one m³ of wood one km (for 100 km that is \$15 - \$20 per m³).
- Harvesting costs begin around \$10 per m³ increasing with steeper terrain, environmental sensitivities, smaller trees etc.
- Depending on market conditions, the average radiata pine tree when harvested is worth \$150 - \$200 to the grower.
- Value of wood being grown (added) each year in one hectare of forest is between \$1200 and \$2000.
- High quality pruned stands, well located to the market can sell for as much as \$50,000 per hectare net to the owner, while unpruned stands may net less than \$20,000 - particularly if logging and cartage costs are higher.

Note: Prices are indicative only.





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