

**NEW ZEALAND PLANTATION
FOREST INDUSTRY**

FACTS & FIGURES



2010/2011

“Training and up-skilling, alongside hard work and dedication, gave me confidence and self belief as well as technical and people skills. I can maximise the financial return for both the client and the contractor and I’ve benefited with much higher wages as I’ve become qualified. Winning FITEC Forestry Modern Apprentice has inspired a lot of youth in my community to give forestry a go. My next goal is to become a trainer/assessor so I can assist them with their own forestry careers.”

*Warren Ropiha
2009 FITEC Forestry Modern Apprentice of the Year*



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43,500 H

The total harvested area was up 1700 hectares from 2009 to an estimated 43,500 hectares in 2010.

NZ\$1.2 B

Log export volumes over the year ending June 2010 increased 30.1% to 9.9 million m³ with an increase in export earnings of 36.8% to \$NZ1.2 billion when compared with the June 2009 year. The considerable rise in log export volumes can be attributed to ongoing demand from China.

23.5 MM³

The total volume of logs harvested over the year ending June 2010 increased 20.5% when compared with the June 2009 year to 23.5 million m³.

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FOREWORD



The forest industry continues to make a major contribution to New Zealand's economy, despite difficult global financial conditions over the last year. Commercial forestry is New Zealand's third-largest export earner and contributes around 2.8 percent of national GDP. Over the past year, around 23.5 million cubic metres of timber was harvested, an increase of 18 percent over the previous year and largely driven by the very large increase in the demand for logs from China. The potential wood availability from the existing estate will exceed 37 million cubic metres a year by 2025 – almost 60 percent more than current harvest levels. Export markets will continue to be a major focus for the forestry sector, as domestic use will only utilise a small proportion of the increased wood supply in coming years. There are significant opportunities to increase export earnings through innovative solutions. With this in mind, the Primary Growth Partnership has already provided significant investment in research and innovation for forestry. From 2012 there will be \$70 million of Crown funding available annually for investment in the primary sector. I look forward to seeing further Primary Growth Partnership investment that will lead to transformation and growth across the forestry sector. The Emissions Trading Scheme also provides opportunities for the industry by recognising the contribution of forests to managing the effects of climate change. Our wood products are derived from a sustainably managed resource that provides a host of economic, environmental and social benefits to all New Zealanders. This publication by the Forest Owners Association, in co-operation with the Ministry of Agriculture and Forestry, is a good example of industry and government working together for sector-wide benefit, and I am delighted to be associated with it.

A handwritten signature in black ink, appearing to be 'D. Carter', written over a thin horizontal line.

Hon David Carter
Minister of Forestry

NEW ZEALAND PLANTED FORESTRY IN SUMMARY

Area and standing volume statistics	1 April '08 ¹	1 April '09	1 April '10 ^P
Net stocked forest area (ha)			
Total estimated area	1,761,000	1,751,000	1,738,000
Growth characteristics			
Standing volume (000 m ³)	445,933	456,874	467,063
Average standing volume (m ³ /ha)	253	261	269
Area-weighted average age (years)	15.2	15.6	15.9
Area by species (ha)			
Radiata pine	1,575,000	1,568,000	1,556,000
Douglas-fir	111,000	109,000	110,000
Cypress species	9,000	9,000	10,000
Other exotic softwoods	26,000	26,000	25,000
Eucalyptus species	25,000	25,000	24,000
Other exotic hardwoods	15,000	13,000	13,000
Planting statistics	Year ended 31 Dec '07	Year ended 31 Dec '08	Year ended 31 Dec '09
New planting (ha)			
Total estimated new planting ²	2,400	1,100	4,300
Restocking	34,700	29,500	32,500
Harvested area awaiting restocking	47,500	43,700	55,300
Harvesting statistics	Year ended 31 Mar '08	Year ended 31 Mar '09	Year ended 31 Mar '10
Harvesting (ha)			
Area clear felled (ha)	41,400	41,800	43,500
Volume clear felled (TRVIB ¹ 000 m ³)	18,663	19,192	20,588
Volume production thinned (TRVIB ¹ 000 m ³)	195	190	146
Total volume removed (TRVIB ¹ 000 m ³)	18,858	19,382	20,734
Average clear fell yield (m ³ /ha)	451	459	473
Area-weighted average clear fell age for radiata pine (years)	27.9	28.3	28.4
Estimated planted forest roundwood removal (000 m ³) ³	20,388	18,847	21,941

Notes:

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

² The method used to estimate new planting is described in A National Exotic Forest Description, MAF.

³ This is an indirect estimate based on the application of conversion factors to the various forestry products.

^P Provisional release 17 December 2010

Source: NEFD 2009, NEFD provisional release 2010

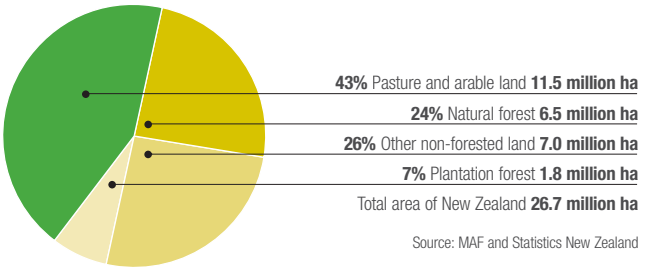
NEW ZEALAND ECONOMIC INDICATORS

For the year ended 31 March

	2009	2010
Population	4,281,200	4,332,000
GDP \$ billion	134.2	132.7
GDP per capita \$	31,343	30,641
Exports \$ billion	41.4	37.8
Forest products exports total \$ billion	3.7	3.9
Total overseas debt \$ billion	176.6	161.0
Annual percentage change in GDP	-1.0%	-0.4%
Inflation (as measured by annual percentage change in CPI)	3.0%	2.0%
Forestry and wood processing sector contribution to GDP	2.8%	2.9%

Source: Statistics New Zealand and FOA as at 31 March 2010

NEW ZEALAND LAND USE 2009



EMPLOYMENT IN FORESTRY AND PROCESSING ACTIVITIES

Activity	Employee count ¹ as at mid-February					
	2004	2005	2006	2007	2008	2009
Forestry	1,020	960 ^r	840 ^r	700 ^r	750	570
Logging	4,170	3,780 ^r	3,450 ^r	3,640 ^r	3,600	3,310
Services to forestry	3,430	3,120 ^r	2,840 ^r	2,310 ^r	2,360	2,130
Total forestry and logging	8,620	7,860^r	7,130^r	6,650^r	6,710	6,010
Log sawmilling	7,600	7,550 ^r	7,040 ^r	6,820 ^r	6,210	5,430
Wood chipping	18	9	12	9	15	9
Timber resawing and dressing	1,920	2,180 ^r	2,130 ^r	2,340 ^r	2,220	1,770
Plywood & veneer manufacturing	2,000	2,020 ^r	1,700 ^r	1,770 ^r	1,570	1,350
Fabricated wood manufacture	1,370	1,280 ^r	1,180 ^r	1,130 ^r	1,010	910
Pulp, paper & paperboard manufacturing	2,720	2,690	2,350 ^r	2,090	2,040	1,900
Total forestry and first stage processing	24,248	22,739^r	20,782^r	20,139^r	19,185	16,809

Source: Statistics New Zealand

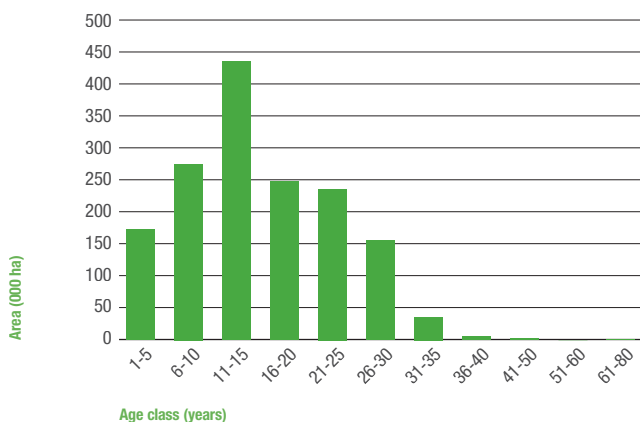
¹ **Employee count** is a head-count of all salary and wage earners for the February reference month.

Previous releases in this series described "Persons engaged" (total number of full-time employees and working proprietors (i.e. number of persons working 30 hours or more per week plus half the number of persons working part-time)), and so the data is not strictly comparable with previous releases in this series.

^r Revised

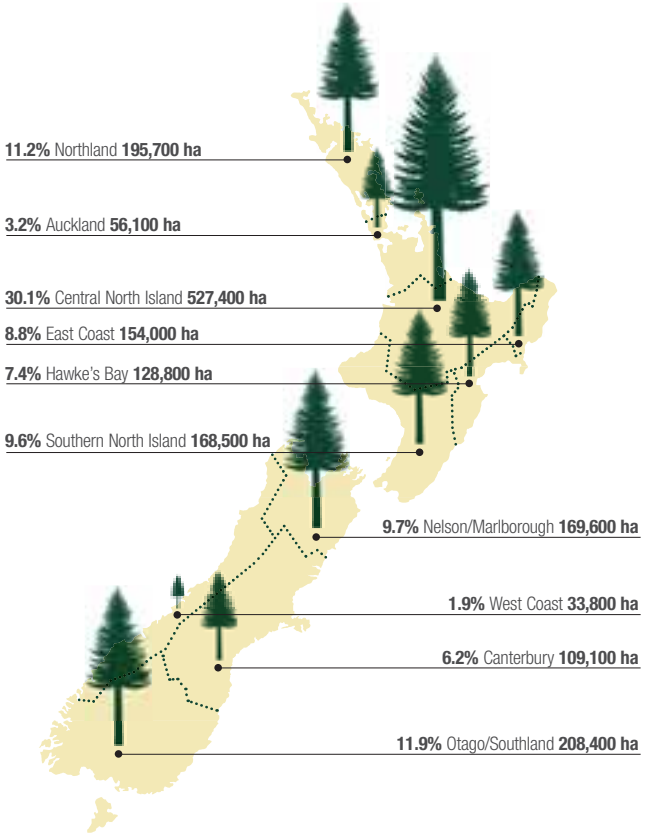
NET STOCKED AREA OF RADIATA PINE

By age class at 1 April 2009



Source: NEFD 2009

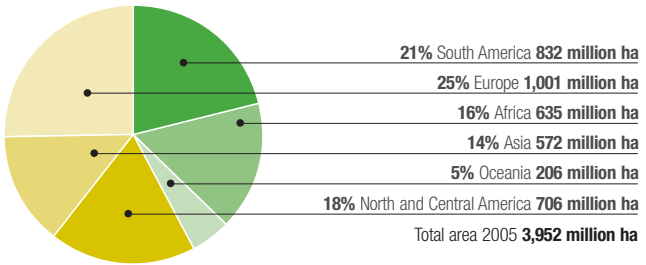
WHERE THE PLANTATION FORESTS ARE



Total 1,751,000 hectares

Source: NEFD 2009

GLOBAL FOREST AREAS BY MAIN REGIONS (2005)



GLOBALLY, THE AREA OF PLANTED FOREST IS INCREASING - IT NOW ACCOUNTS FOR 7% OF TOTAL FOREST AREA, OR 264 MILLION HECTARES. DURING 2005-2010, THE AREA OF PLANTED FOREST INCREASED BY ABOUT 5 MILLION HECTARES PER YEAR. MOST OF THIS WAS ESTABLISHED THROUGH AFFORESTATION, I.E. PLANTING OF AREAS NOT FORESTED IN RECENT TIMES, PARTICULARLY IN CHINA. THREE-QUARTERS OF ALL PLANTED FORESTS CONSIST OF NATIVE SPECIES WHILE ONE-QUARTER COMPRISES INTRODUCED SPECIES (EXOTIC).

NEW ZEALAND HAS 1.7 MILLION HECTARES OF EXOTIC, HIGHLY PRODUCTIVE, SUSTAINABLY MANAGED PLANTATION FORESTS.

NEW ZEALAND PLANTED FOREST OWNERSHIP/MANAGEMENT

As at 1 April 2010

Forest Owner/Manager	Net stocked forest area (000 ha)	
	2009	2010
Hancock Natural Resource Group	262	257
Kaingaroa Timberlands	174	175
Matariki Forests	131	128
Global Forest Partners LP	97	96
Ermslaw One	94	95
Crown Forestry (MAF)	63	61
Juken New Zealand	55	60
Pan Pac Forest Products	35	35
GMO Renewable Resources ^{1,2}	27	24
Hikurangi Forest Farms	26	25
Wenita ²	25	25
Roger Dickie NZ	24	24
Blakely Pacific	23	22
Forest Enterprises	21	21
City Forests	16	16
Lake Taupo Forest Trust	13	12
Others (Under 10,000 ha)	665	662
Total Plantation Forest Area	1,751	1,738

¹ GMO Renewable Resources is Investment Advisor to Kaingaroa Timberlands.

² GMO Renewable Resources has a 38% share in Wenita.

Source: FOA



NEW ZEALAND PLANTATION FOREST OWNERSHIP – UNDERLYING LAND STATUS

As at 1 April 2010

Productive area (ha)	Underlying land status				Total
	Freehold	Leasehold			
		Crown	Māori Inc.	Other	
Hancock Natural Resource Group	108	28	74	64	274
Kaingaroa Timberlands	1	6	173	0	181
Matariki Forests	53	36	33	7	128
Global Forest Partners LP	34	61		1	96
Ermslaw One	41	47	4	2	95
Crown Forestry (MAF)		9	52		61
Juken New Zealand	9	44	5	2	60
Pan Pac Forest Products	4	30			35
GMO Renewable Resources	14	4	3	3	24
Hikurangi Forest Farms	26		2	0	28
Wenita	6			24	29
Roger Dickie NZ	24				24
Blakely Pacific	21			1	22
Forest Enterprises	21				21
City Forests	15			1	16
Lake Taupo Forest Trust	12	9			21
Totals	389	274	346	106	1,115

Crown land includes unlicensed Crown forest land as well as Crown-owned freehold land purchased by Timberlands West Coast in the 1990s and transferred to the Crown in Jan 2009.

Source: FOA



NEW ZEALAND PLANTATION FOREST MANAGEMENT

As at 1 April 2010

Firm/entity	Forest management	
	TIMO	Property Mgmt
Hancock Forest Management (NZ) Ltd	270	225
Matariki Forests		128
Global Forest Partners LP	63	33
Ernslaw One		95
Crown Forestry (MAF)	–	3
Juken New Zealand		60
Pan Pac Forest Products		3
GMO Renewable Resources ¹	24	–
Hikurangi Forest Farms Ltd	–	–
Wenita ¹		25
Roger Dickie NZ	–	–
Forest Management NZ Ltd		24
Blakely Pacific		22
Forest Enterprises	21	
City Forests		16
Lake Taupo Forest Trust		
PF Olsen Ltd	3	157
Timberlands Limited		184
NZFM	–	40
Totals	381	1,015

This table is designed to identify who manages New Zealand forests.

Within “management” there are 2 main categories:

1. **Timberland Investment Management (commonly referred to as a TIMO).**

These organisations do not own any forest. The forests are owned by retail investors or institutional funds.

2. **Property Management** – planning and managing field operations, mapping and maintaining records.

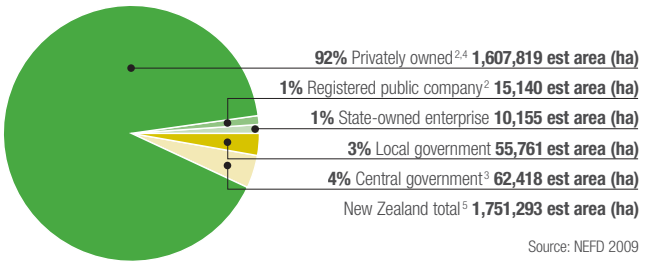
Some entities carry out both functions within the same organisation, others carry out both for some parts of a forest estate and not others.

¹ GMO Renewable Resources has a 38% share in Wenita.

Source: FOA

PLANTATION FOREST OWNERSHIP¹

Net stocked planted production forest area as at 1 April 2009



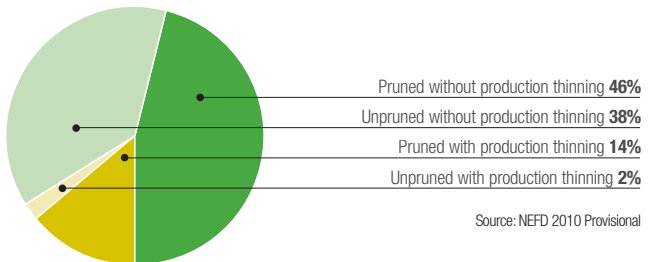
Note:

- ¹ Ownership is based solely on the ownership of the forest irrespective of the ownership of the land.
- ² "Privately owned" includes all privately owned forests. The legal entities included in this category are private companies, partnerships, individuals and trusts, which include Māori trusts and incorporations.
- ³ "Central government" forests are predominantly Crown-owned forests on Māori leasehold land. These forests are managed by the Ministry of Agriculture and Forestry.
- ⁴ Note that significant changes in forest ownership occurred during 2003 resulting in large areas of forest previously owned by public companies now being privately owned.
- ⁵ Individual entries may not sum to totals shown due to rounding.

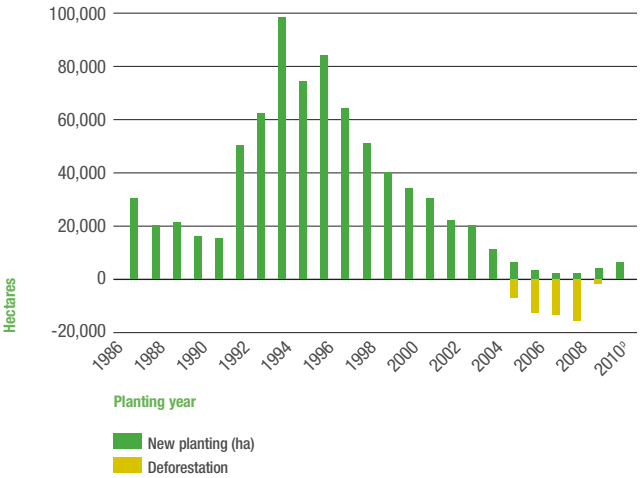
FOREST MANAGEMENT TRENDS – RADIATA PINE

	2005	2006	2007	2008	2009	2010
Pruned without production thinning	49%	48%	47%	45%	46%	46%
Unpruned without production thinning	34%	36%	37%	39%	38%	38%
Pruned with production thinning	14%	14%	14%	14%	14%	14%
Unpruned with production thinning	3%	2%	2%	2%	2%	2%

FOREST MANAGEMENT TRENDS – RADIATA PINE (2010)



NEW FOREST PLANTING AND DEFORESTATION



Source: NEFD 2009

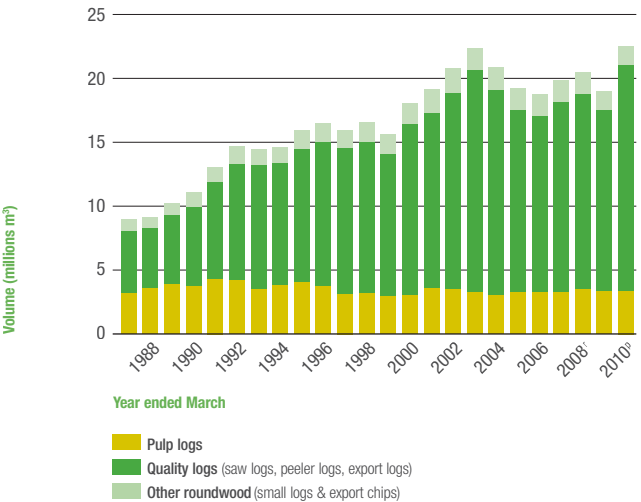
Note:

These estimates do not include immature forest cleared for other land uses.

The 2010 deforestation figure is not yet available.

^p Provisional

PLANTATION FOREST HARVEST

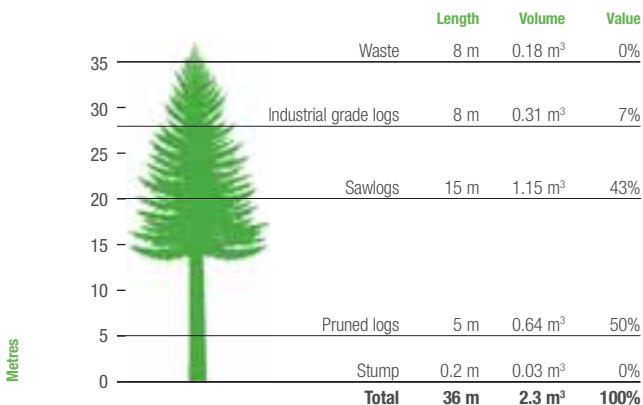


^r Revised

^p Provisional

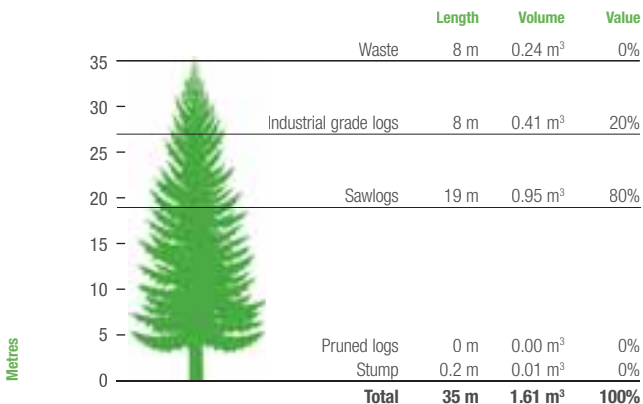
Source: MAF

TYPICAL LOG OUT-TURN



Direct Sawlog Regime

Pruned and thinned to waste. Final Crop Stocking 228 spha.



Structural Regime

No pruning. Thinned to waste. Final Crop Stocking 487 spha.

Average site (Site Index 29 m, 300Index 23 m³/ha/yr). Clearfelled at 28 years.

Approximately 45% of the pine estate is managed under a regime with pruning and thinning to waste.

Approximately 39% of the pine estate is managed under a regime with no pruning and thinning to waste.

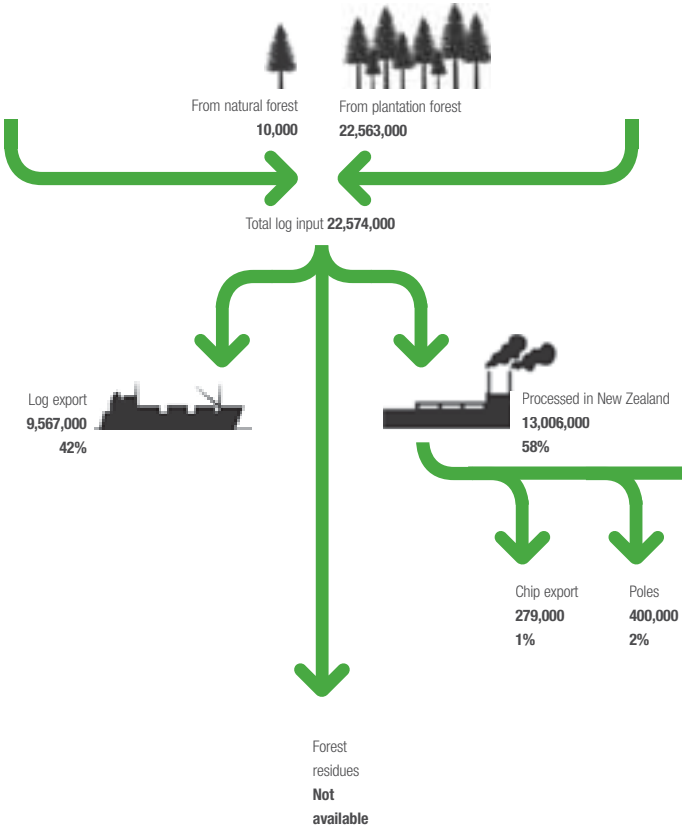
Source: Scion



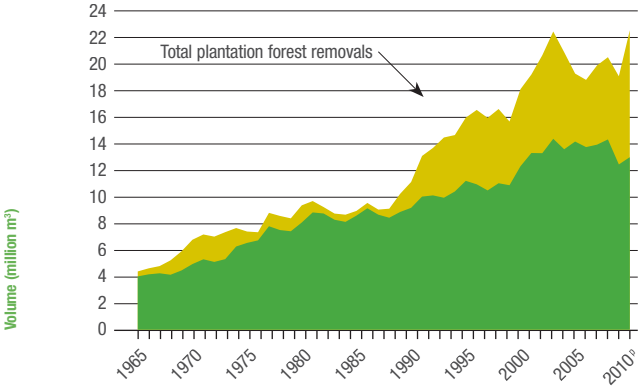
LOG FLOW IN THE NEW ZEALAND FORESTRY INDUSTRY

Volumes in m³ roundwood equivalent. Year ended 31 March 2010

Source: MAF and FOA



WHERE THE LOG HARVEST GOES



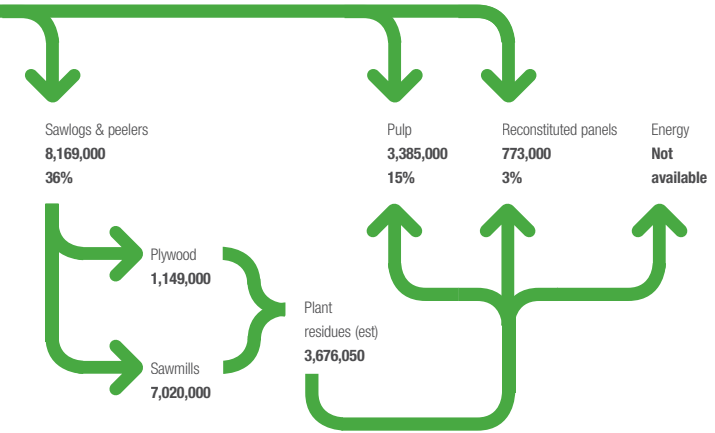
Year ended 31 March

- Export logs
- Processed in New Zealand

Note: Export logs data in 2007, further processed and production forest removals data from 2003 to 2009 have been revised.

^p Provisional

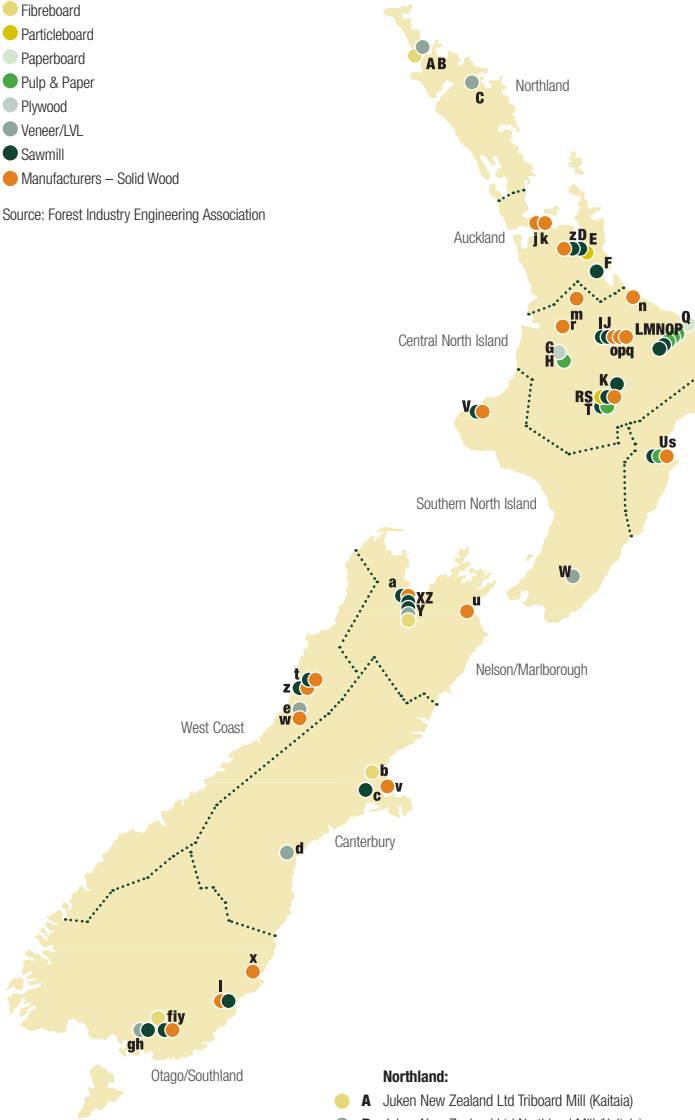
Source: MAF



LOCATION OF MAJOR WOOD PROCESSORS BY WOOD SUPPLY REGION 2010

- Fibreboard
- Particleboard
- Paperboard
- Pulp & Paper
- Plywood
- Veneer/LVL
- Sawmill
- Manufacturers – Solid Wood

Source: Forest Industry Engineering Association



Northland:

- **A** Juken New Zealand Ltd Triboard Mill (Kaitaia)
- **B** Juken New Zealand Ltd Northland Mill (Kaitaia)
- **C** Carter Holt Harvey Woodproducts, LVL (Marsden Point)

Auckland:

- **D** Thames Timber Ltd (Thames) **50,000-99,999 m³**
- **z** SCFP (Thames)
- **E** Carter Holt Harvey Woodproducts, Kopine (Kopu)
- **j** Jenkin Timber (Auckland)
- **k** Goodwood Industries (Auckland)



Central North Island:

- **F** Claymark Sawmills Ltd (Katikati) **50,000-99,999 m³ sawn**
- **G** Carter Holt Harvey Woodproducts, Plywood (Tokoroa)
- **H** Carter Holt Harvey Kinleith (Tokoroa)
- **m** Morre Levesque Morris (Cambridge)
- **n** Pukepine Sawmills (Te Puke)
- **I** Claymark Rotorua Sawmill Ltd (Rotorua) **50,000-99,999 m³**
- **J** Tachikawa Forest Products (NZ) Ltd (Rotorua) **> 100,000 m³**
- **o** Lockwood Group (Rotorua)
- **p** Hume Pine (Rotorua)
- **q** Verda (Rotorua)
- **r** Otorohanga Timber Company (Otorohanga)
- **K** Red Stag Timber (Waipa) **> 100,000 m³**
- **L** Carter Holt Harvey Woodproducts, Kawerau Sawmill (Kawerau) **> 100,000 m³**
- **M** Sequel Lumber (Kawerau) **50,000-99,999 m³**
- **N** SCA Hygiene Australasia (Kawerau)
- **O** Carter Holt Harvey Tasman Ltd (Kawerau)
- **P** Norske Skog Tasman Ltd (Kawerau)
- **Q** Carter Holt Harvey Pulp & Paper (Whakatane)
- **R** Laminex Group (Taupo)
- **S** Tenon Ltd (Taupo) **> 100,000 m³**
- **T** Winstone Pulp International (Ohakune) **50,000-99,999 m³**

Hawke's Bay:

- **U** Pan Pac Forest Products Ltd (Napier) **> 100,000 m³**
- **s** PWP (Napier)

Southern North Island:

- **V** Taranakipine Ltd (New Plymouth) **50,000-99,999 m³**
- **W** Juken New Zealand (Masterton)

Nelson/Marlborough:

- **X** Waimea Sawmillers Ltd (Nelson) **50,000-99,999 m³**
- **Y** Nelson Pine Industries Ltd (Richmond)
- **Z** Southpine (Nelson) Ltd (Nelson) **50,000-99,999 m³**
- **u** Flight Timbers (Blenheim)
- **a** Carter Holt Harvey Woodproducts, Nelson Sawmill (Eves Valley) **> 100,000 m³**

Canterbury:

- **b** Daiken (Rangiora)
- **c** SRS New Zealand Ltd (Rolleston) **50,000-99,999 m³**
- **d** Starwood Products Ltd (Timaru)
- **v** Southern Pine Products (Christchurch)

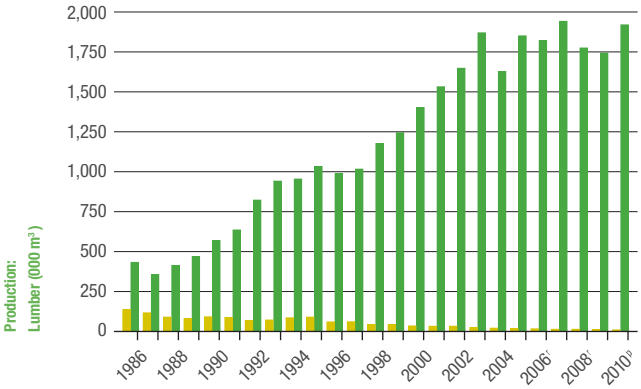
West Coast:

- **e** International Panel and Lumber Ltd (Greymouth)
- **z** Stillwater Lumber Limited (Greymouth)
- **t** Southern Pine Products (Stillwater)
- **w** Westco Lagan Limited (Hokitika)

Otago/Southland:

- **f** Dongwha Patinna NZ Ltd (Mataura)
- **g** Southland Veneers (Invercargill)
- **h** Niagara Sawmilling Co. Ltd (Invercargill) **50,000-99,999 m³**
- **x** SCFP (Mosgiel)
- **I** SCFP (Milton)
- **y** Niagara/PT (Invercargill/Ashburton)
- **i** Craigpine Timber Ltd (Winton) **> 100,000 m³**

LUMBER PRODUCTION AND EXPORTS



Year ended 31 March

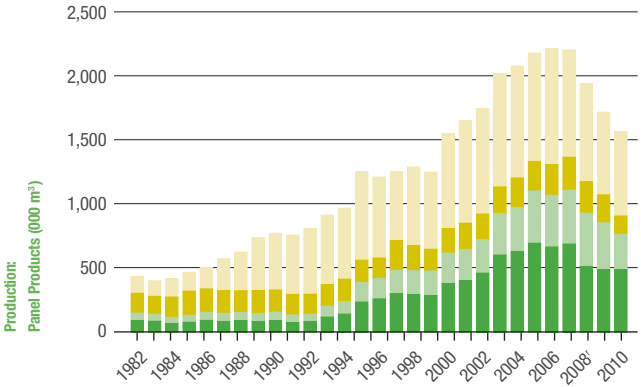
- Indigenous and plantation grown forest lumber
- Lumber exports

^r Revised – Production: 2006, 2007, 2008, 2009; Exports: 2008, 2009

^p Provisional

Source: MAF

PANEL PRODUCTS PRODUCTION



Year ended 31 March

- Veneer
- Plywood
- Particleboard
- Fibreboard

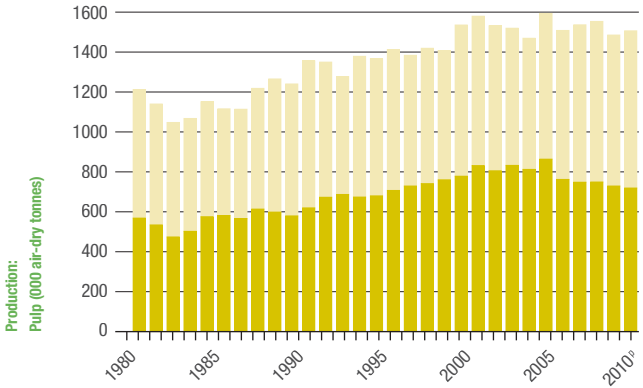
Note: Plywood includes laminated veneer lumber.

Fibreboard includes MDF, hardboard and softboard.

^r Revised – 2007, 2008, 2009

Source: MAF

WOOD PULP PRODUCTION



Year ended 31 March

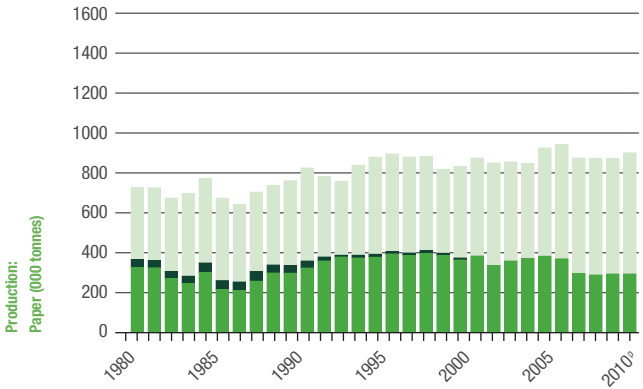
- Mechanical pulp
- Chemical pulp

Revised – 2008 and 2009

^p Provisional

Source: MAF

PAPER AND PAPERBOARD PRODUCTION



Year ended 31 March

- Newsprint
- Other printing and writing paper
- Other paper and paperboard*

Revised – 2009

^p Provisional

Source: MAF

TOP EXPORT DESTINATIONS

Exports of forestry products by main countries of destination for the year ended March 2010 (provisional)

United Arab Emirates		India		Thailand		China, People's Republic of	
\$NZ30,335		\$NZ151,561		\$NZ55,147		\$NZ936,494	
Logs & poles	17.3%	Logs & poles	61.8%	Logs & poles	3.1%	Logs & poles	65.1%
Sawn timber	65.0%	Sawn timber	4.0%	Sawn timber	33.2%	Sawn timber	13.7%
Wood pulp	–	Wood pulp	0.1%	Wood pulp	40.2%	Wood pulp	10.9%
Paper & paperboard	1.9%	Paper & paperboard	26.9%	Paper & paperboard	9.9%	Paper & paperboard	4.4%
Panel products	5.4%	Panel products	1.7%	Panel products	2.9%	Panel products	3.7%
All other	10.4%	All other	5.6%	All other	10.7%	All other	2.2%



Saudi Arabia		Vietnam		Malaysia		Indonesia	
\$NZ17,800		\$NZ87,465		\$NZ56,332		\$NZ165,783	
Logs & poles	–	Logs & poles	2.4%	Logs & poles	0.8%	Logs & poles	0.4%
Sawn timber	47.8%	Sawn timber	69.2%	Sawn timber	11.0%	Sawn timber	12.6%
Wood pulp	–	Wood pulp	0.5%	Wood pulp	36.7%	Wood pulp	67.9%
Paper & paperboard	4.4%	Paper & paperboard	1.7%	Paper & paperboard	39.9%	Paper & paperboard	3.2%
Panel products	41.5%	Panel products	24.0%	Panel products	10.0%	Panel products	9.3%
All other	6.2%	All other	2.2%	All other	1.6%	All other	6.7%

Note:

Values are NZ\$ f.o.b. and may include items (eg. some plywood items) for which no quantities are given.

Paper and paperboard includes newsprint. Newsprint data sourced by FOA for June 2010 year.

All other forestry products include chips, mouldings, manufactures of paper and paperboard, furniture and miscellaneous forestry

Other countries are all other countries to which New Zealand has exported forestry products during the year.

Source: Statistics New Zealand and FOA

Korea, Republic of		Japan		USA		Other countries	
\$NZ400,476		\$NZ433,970		\$NZ235,359		\$NZ224,136	
Logs & poles	69.8%	Logs & poles	15.5%	Logs & poles	–	Logs & poles	3.1%
Sawn timber	4.6%	Sawn timber	5.4%	Sawn timber	65.6%	Sawn timber	32.6%
Wood pulp	18.8%	Wood pulp	24.8%	Wood pulp	–	Wood pulp	6.0%
Paper & paperboard	2.6%	Paper & paperboard	0.0%	Paper & paperboard	2.4%	Paper & paperboard	31.1%
Panel products	3.9%	Panel products	40.5%	Panel products	7.5%	Panel products	5.8%
All other	0.3%	All other	13.9%	All other	24.5%	All other	21.4%



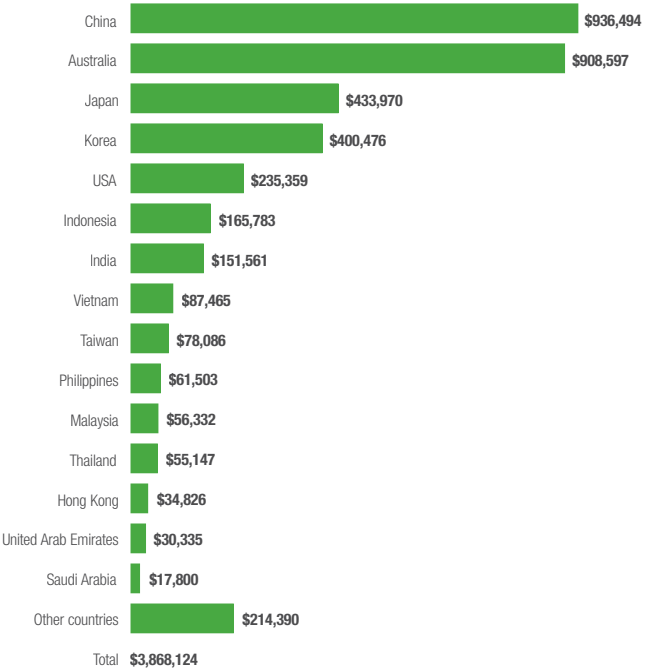
Australia		Philippines		Hong Kong (SAR)		Taiwan	
\$NZ908,597		\$NZ61,503		\$NZ34,826		\$NZ78,086	
Logs & poles	0.0%	Logs & poles	0.1%	Logs & poles	–	Logs & poles	10.9%
Sawn timber	18.0%	Sawn timber	18.3%	Sawn timber	12.3%	Sawn timber	28.7%
Wood pulp	8.7%	Wood pulp	8.3%	Wood pulp	–	Wood pulp	40.5%
Paper & paperboard	34.6%	Paper & paperboard	38.5%	Paper & paperboard	84.4%	Paper & paperboard	11.5%
Panel products	8.1%	Panel products	26.3%	Panel products	1.2%	Panel products	7.6%
All other	30.7%	All other	8.6%	All other	2.1%	All other	0.8%

products.

EXPORTS OF FORESTRY PRODUCTS FROM NEW ZEALAND

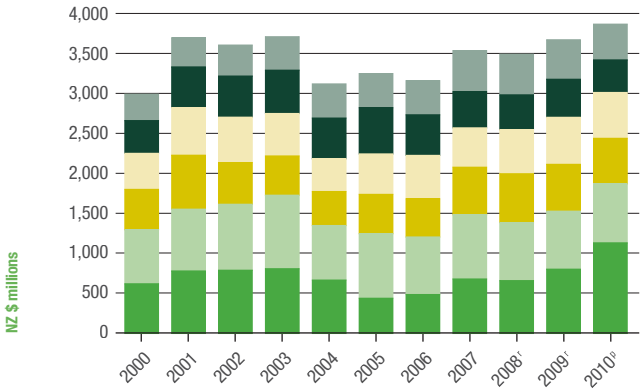
For the year ended 31 March 2010

Top export destinations



Source: Statistics New Zealand and FOA

MAJOR EXPORT EARNERS



Year ended 31 March

- Logs and chips
- Lumber
- Wood pulp
- Paper and paperboard
- Panel products
- Other products

Note: Excludes re-exports. Newspaper data for 12 months ending June 2010

^r Revised

^p Provisional

Source: Statistics New Zealand and FOA



PRODUCTION AND EXPORTS OF SELECTED FORESTRY PRODUCTS

Year ended 31 March 2010

Forestry Product	2007				Total production	Quantity exported ³
	Total production	Quantity exported ³	% Exported	Export value (\$NZm f.o.b.)		
Logs (000 m ³)	19,915	5,973	29.99%	634	20,536	6,199
Wood chips(000 BDU)	..	267,836	..	47	..	366,832
Sawn timber (000 m ³)	4,301	1,938	45.06%	805	4,339	1,771
Chemical pulp (tonnes)	784,995	612,641	78.04%	516	801,179	623,128
Mechanical pulp (tonnes)	743,996	197,789	26.58%	79	745,288	243,102
Newsprint (tonnes)	292,015	139,020	47.61%	151	258,654	188,053
Other paper and paperboard (tonnes)	579,931	378,530	65.27%	342	585,429	374,770
Fibreboard (m ³)	836,755	657,072	78.53%	243	765,044	579,222
Plywood (m ³) ²	421,794	72,463	17.18%	109	416,383	77,680
Veneer (m ³)	688,312	154,740	22.48%	48	512,575	134,820
Particleboard (m ³)	256,239	110,197	43.01%	51	245,309	118,341
Cont shaped wood	..	..	..	123	..	..
Manufactures	..	..	..	188	..	..
Wooden furniture	..	..	..	55	..	..
Miscellaneous and other wood products				150		
All forestry products	..	..	..	3,540	..	..
Total New Zealand exports	..	..	..	33,479	..	..
Forest exports as a % of total exports	..	..	..	10.57%	..	..

Note:

¹ Newsprint export data for 12 months ending June 2010.

² Plywood includes laminated veneer lumber.

³ Exports excludes re-exports.

[†] Revised

[‡] Provisional

.. Not available

Source: MAF, Statistics New Zealand and FOA

% Exported	2008 ^r		2009 ^r			2010 ^p			
	Export value (\$NZm f.o.b.)	Total production	Quantity ex-ported ³	% Exported	Export value (\$NZm f.o.b.)	Total production	Quantity Ex-ported ³	% Exported	Export value (\$NZm f.o.b.)
30.19%	598	19,099	6,648	34.81%	734	22,568	9,565	42.38%	1,076
..	62	..	296,038	..	70	..	279,124	..	58
40.82%	727	3,593	1,739	48.40%	726	3,814	1,917	50.26%	739
77.78%	514	753,062	583,383	77.47%	490	784,235	621,900	79.30%	465
32.62%	97	724,880	233,162	32.17%	96	715,106	228,074	31.89%	105
72.70%	202	291,279	181,865	62.44%	202	287,387	203,326 ¹	70.75%	235
64.02%	350	578,746	372,937	64.44%	387	606,733	367,029	60.49%	340
75.71%	229	644,654	500,992	77.71%	246	657,732	521,030	79.22%	216
18.66%	112	365,664	82,183	22.48%	113	274,717	62,760	22.85%	109
26.30%	43	487,788	146,334	30.00%	50	488,943	120,897	24.73%	38
48.24%	53	217,770	133,483	61.30%	68	143,396	72,199	50.35%	44
..	119	..	..	..	96	..	..	..	105
..	213	..	..	..	225	..	..	..	227
..	52	..	..	..	42	..	..	..	32
..	126	..	..	..	131	..	..	..	83
..	3,496	..	..	..	3,676	..	..	..	3,872
..	36,645	..	..	..	41,408	..	..	..	37,838
..	9.54%	..	..	..	8.88%	..	..	..	10.23%



VALUE OF EXPORTS BY PRODUCT AND DESTINATION

Year ended 31 March 2010

Country of destination	Logs & poles value (\$NZ000)	Lumber value (\$NZ000)
Australia	75	163,077
China, People's Republic of	609,636	128,251
Japan	67,150	23,349
Korea, Republic of	279,594	18,466
United States of America	–	154,412
Indonesia	734	20,807
Philippines	40	11,252
India	93,686	6,027
Taiwan	8,519	22,382
Vietnam	2,092	60,530
United Arab Emirates	5,250	19,720
Saudi Arabia	–	8,511
Thailand	1,729	18,297
Malaysia	433	6,173
Hong Kong (Special Administrative Region)	–	4,280
Fiji	18	718
Other countries	6,994	72,436
Total	1,075,950	738,688

Note:

Values are \$NZ f.o.b. and may include items (e.g. some plywood items) for which no quantities are given. Newsprint data for 12 months ending June 2010.

All other forestry products include chips, mouldings, manufactures of paper and paperboard, furniture and miscellaneous forestry products.

Other countries are all other countries to which New Zealand has exported forestry products during the year.

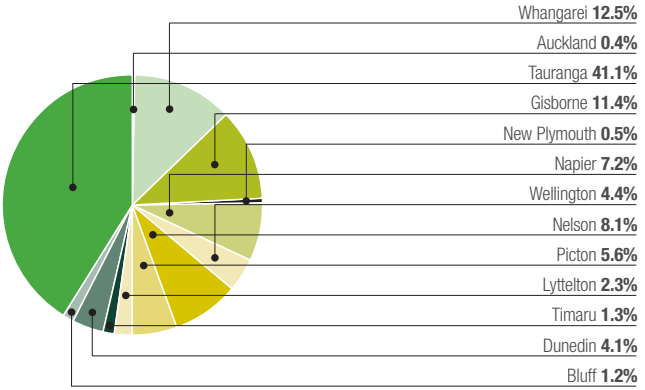
Source: Statistics New Zealand and FOA

Wood pulp value (\$NZ000)	Paper & paperboard value (\$NZ000)	Panel products value (\$NZ000)	All other forestry products value (\$NZ000)	All forestry products value (\$NZ000)	% of Total
78,711	314,734	73,304	278,696	908,597	23%
102,247	41,509	34,626	20,225	936,494	24%
107,645	2	175,579	60,245	433,970	11%
75,158	10,459	15,601	1,198	400,476	10%
–	5,574	17,686	57,687	235,359	6%
112,484	5,270	15,403	11,085	165,783	4%
5,124	23,649	16,173	5,265	61,503	2%
98	40,754	2,556	8,439	151,560	4%
31,651	8,980	5,922	632	78,086	2%
415	1,522	20,960	1,946	87,465	2%
–	574	1,648	3,143	30,335	1%
–	791	7,394	1,104	17,800	0%
22,166	5,473	1,605	5,877	55,147	1%
20,676	22,482	5,653	915	56,332	1%
–	29,379	427	740	34,826	1%
–	11,687	791	5,901	19,115	0%
13,429	51,179	12,246	41,992	198,276	5%
569,804	574,018	407,574	505,090	3,871,124	100%



LOG EXPORTS BY PORT

Year ended 31 March 2010

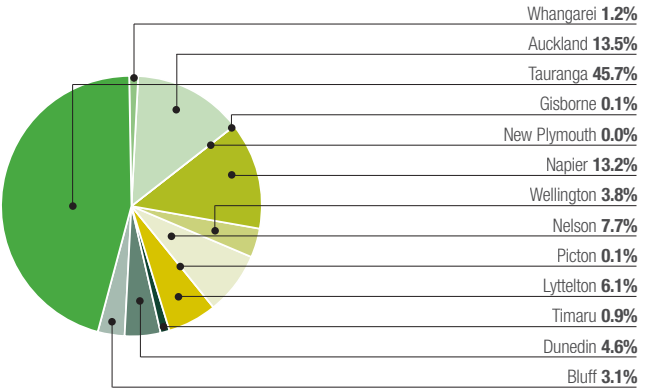


Total quantity: 9,567,382 m³

Source: Statistics New Zealand

SAWN TIMBER EXPORTS BY PORT

Year ended 31 March 2010



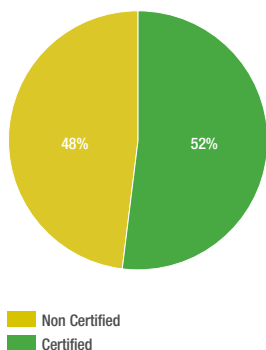
Total quantity: 1,915,852 m³

Source: Statistics New Zealand

PROPORTION OF NEW ZEALAND'S 1.75 MILLION HA PLANTATION CERTIFIED BY FSC

Area as at 1 July 2010

	Productive area (ha)	Total certified area (ha)
Hancock Forest Management (NZ) Ltd	206,921	249,715
Timberlands Ltd	182,531	198,334
Ernslaw One Ltd (North Island)	72,059	104,727
Nelson Forests Ltd	63,040	77,930
PF Olsen Ltd	62,629	75,631
Juken New Zealand Ltd	62,331	75,751
Rayonier NZ	38,055	49,300
Pan Pac Forest Products Ltd	34,271	44,937
NZ Forest Managers Ltd	34,073	49,309
Crown Forestry, MAF (West Coast)	29,808	45,284
Hikurangi Forest Farms Ltd	29,005	35,005
Wenita Forest Products Ltd	25,070	29,203
Blakely Pacific	22,206	29,587
Ernslaw One Ltd (South Island)	22,127	28,634
City Forests Ltd	15,997	19,980
Southland Plantation Forest Company of NZ	10,130	13,703
Total	910,253	1,127,030
Other	19,695	19,695
Total Plantation FSC	929,948	1,146,725



Note: Productive Area = Net Stocked Area + Area Awaiting Restocking.

Source: FSC/NZ FSC Certified Forest Owner/Manager Cluster Group

FOREST INDUSTRIES TRAINING STATISTICS

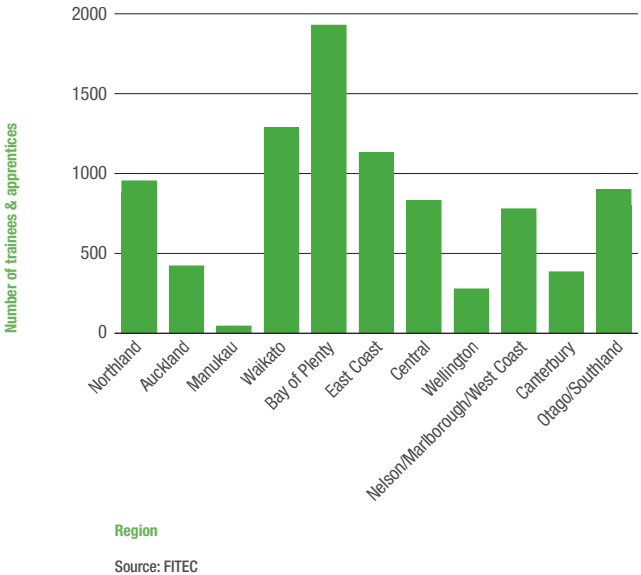
TRAINEES AND APPRENTICES BY SECTOR

as at December 2010



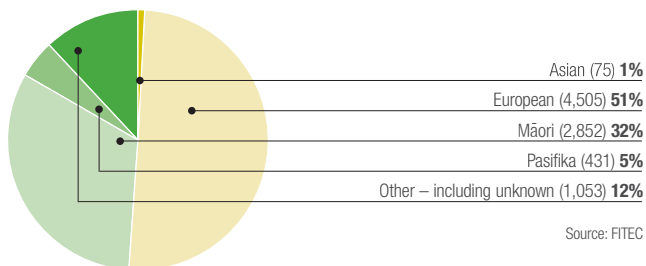
TRAINEES AND APPRENTICES BY REGION

as at December 2010



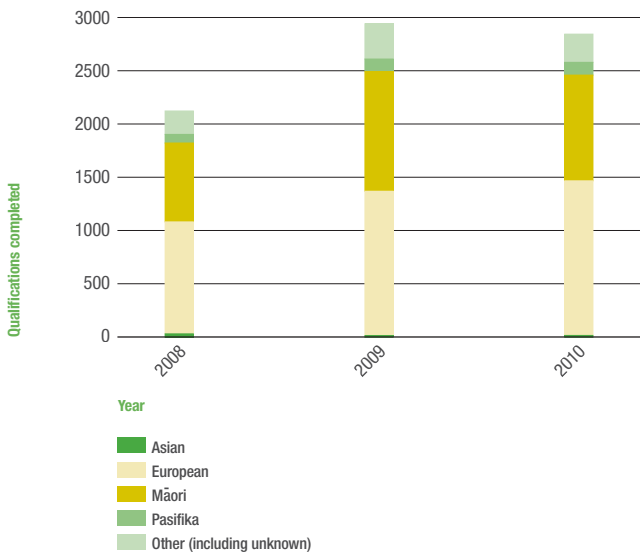
TRAINEES AND APPRENTICES BY ETHNICITY

as at December 2010



QUALIFICATIONS COMPLETED BY ETHNICITY

as at December 2010





MEMBERS OF THE NEW ZEALAND FOREST OWNERS ASSOCIATION ARE COMMITTED TO THE FOLLOWING AGREEMENTS:

New Zealand Forest Accord 1991

The New Zealand Forest Accord 1991 was updated in 2007 to reaffirm the principles of the 1991 Accord and respond to the threat of climate change. It 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 forests as essential
- Ensure any use of wood from indigenous forests is on a sustainable, value-added basis
- Ensure new plantation forests will not disturb areas of natural indigenous vegetation

www.nzfoa.org.nz

New Zealand Climate Change Accord 2007

Acknowledging, inter alia:

- The environmental benefits delivered by indigenous and plantation forests
- That carbon sequestration by forests is a key mechanism to offset greenhouse gas emissions
- That policies must be consistent with the Polluter Pays Principle, be broad-based and cover all greenhouse gases in all sectors, should avoid net increases in greenhouse gases, should promote the retention and expansion of indigenous forests and the replanting and expansion of plantation forests; ensure all sectors are taking responsibility, be consistent with customary rights and the Treaty of Waitangi and acknowledge that wood is a renewable reusable and recyclable resource.

www.nzfoa.org.nz

Eliminating illegal forest products

On 14 August 2008 a statement was signed in which the signatories called on the New Zealand government, importers, processors, retailers, New Zealand forest and plantation managers and processors of forest and plantation products to support their call to strongly oppose the import and the use of illegally harvested and traded forest products in New Zealand. Trading in illegal products contributes to deforestation, biodiversity loss, poverty and other adverse social effects, and undermines the viability of legal forest products.

Prohibition of the import of these products will benefit New Zealand's legal forest products industries; assist in improving the producer countries' social, environmental, and economic well being; and show that New Zealand is responsibly addressing the problem. Illegal logging is not sustainable and thus eliminating illegal logging is an important step towards achieving sustainable forestry globally.

The organisations that signed the statement were: the Ecologic Foundation, Environment & Conservation Organisations of New Zealand (ECO), Greenpeace Aotearoa New Zealand, New Zealand Forest Owners Association, New Zealand Farm Forestry Association, New Zealand Pine Manufacturers Association, Royal Forest and Bird Protection Society, Sustainable Energy Forum, Wood Processors Association of New Zealand and WWF New Zealand.

www.nzfoa.org.nz

Log Transport Safety Accord

Log truck operators and forest owners on 7 August 2008 signed an updated Log Transport Safety Accord designed to further improve the safety of all road users. Since the accord was first signed in 2001 there has been a 65% reduction in log truck crashes, and a 75% reduction in rollover crashes, during a time of rapid growth in the logging industry. The Accord has been updated with the aim of reducing the rollover crash rate even further.

www.nzfoa.org.nz

Principles for Commercial Plantation Forest Management in New Zealand

To promote understanding between the signatory parties with a view to New Zealand achieving environmental excellence in plantation forest management and participating as an effective advocate internationally for the sustainable management of plantation forests and the protection, preservation, and sustainable management of natural forests. These principles are complementary to the New Zealand Forest Accord (August 1991).

www.nzfoa.org.nz



NZ WOOD: FORESTS AND WOOD FIGHT CLIMATE CHANGE

Wood is the world's most renewable raw material. For this reason forests and the wood they provide are vital in the fight against climate change. As the effects of global warming impact on our environment, the use of renewable and sustainable building materials has never been so important.

The stages of the wood story – planting and renewal, growth, harvesting and use – are part of a renewable cycle that takes and stores carbon dioxide from the atmosphere, making wood a better-than-carbon-neutral building material.

Wood is the only construction material which has absorbed CO₂ from the atmosphere when produced, not emitted more

During its production, one tonne of:

- concrete – has released 159 kilos of CO₂ into the atmosphere
- steel – has released 1.24 tonnes of CO₂ into the atmosphere
- aluminium – has released 9.3 tonnes of CO₂ into the atmosphere
- wood, however, has absorbed a net 1.7 tonnes of CO₂ from the atmosphere, over and above the energy expended in growing, harvesting and processing.

The more timber you use in a house, the more CO₂ you remove from the atmosphere

- It takes around 20 trees to build an average house frame
- A steel house frame has added 4.5 tonnes of CO₂ to the atmosphere
- A wooden house frame has absorbed 9.5 tonnes of CO₂ from the atmosphere
- Choosing timber options for an average house can take around 20 tonnes net of CO₂ out of the atmosphere (saving the equivalent of 150 trips Auckland to Wellington, or 7.1 years of car use)
- Using alternative materials (concrete, steel, brick and aluminium) can add 24 tonnes net CO₂ to the atmosphere (costing the equivalent of 180 trips Auckland to Wellington, or 8.6 years of car use)

Using wood is something we can all do to help the environment. By demanding and using more sustainably produced wood, we can ensure that more trees will be planted and more carbon dioxide will be absorbed from the atmosphere.

The result is a better world for ourselves, our families and future generations. It's simple.

Wood. Our most renewable raw material.

<http://www.nzwood.co.nz>



MAJOR NEW ZEALAND FORESTRY SPECIES

There are a range of New Zealand plantation-grown exotic and indigenous species to suit a variety of applications including structural, appearance, engineered wood products, furniture and joinery.

Radiata Pine

Radiata Pine has a number of structural uses including decking, fencing, exterior cladding, window sashes, pergolas, landscaping, shingles, barge boards and exterior trim. Untreated, it can be used for furniture, mouldings, trim and panelling. Panel products, such as plywood, MDF and laminated veneer lumber, are also available from Radiata Pine resources.

Douglas-fir

Douglas-fir can be used for roof trusses and framing, internal panelling, and glue-laminated beams. As well as being popular for light timber framing, the larger dimensional stock is sought after for exposed interior posts and beams because of its good stability and freedom from twist. Glue lamination to produce beams, arches and scaffold planks is also common.

Macrocarpa

Macrocarpa has a range of uses including ceiling sarking, exposed beams, flooring, wall panelling, framing, furniture, solid wood bench tops, architraves and skirtings. It can be used outside for weatherboard, soffit, fascia, pergolas, decking and outdoor furniture. It is not recommended in-ground for construction purposes (including in-ground posts for fencing, decking and pergolas).

Eucalypts

Eucalypts have a number of applications. The Blue Gum group is suitable for tongue and groove flooring, in-sequence parquet, overlay, joinery stairs, doors, furniture, panelling, decking, outdoor furniture, and sliced veneer. The Stringybark group is suitable for flooring, joinery, decking, cross arms (mainly *E. microcorys*), and sliced veneer. The Ash group is suitable for furniture, joinery, and sliced veneer.

Source: <http://www.nzwood.co.nz/species/>



NEW ZEALAND FOREST OWNERS ASSOCIATION STRATEGIC PLAN

Vision

New Zealand planted forests are a major part of the New Zealand economy, providing a range of sustainably managed products, and acknowledged as an integral part of the country's regional development. They are also recognised as a major component in New Zealand's contribution to meeting the effects of climate change and addressing a range of other environmental challenges.

Against this background, the New Zealand Forest Owners Association is the recognised and respected body of the commercial forest growing industry.

Mission

The mission statement of New Zealand Forest Owners Association (FOA) is:

"To actively promote sustainable commercial forestry in New Zealand with a view to creating a favourable economic, political and social climate for the profitable operation of members' businesses."

Objectives

Objective 1 – Services

Provide specific services to members which protect or add value to their businesses.

Objective 2 – Promotion

Promote forestry as an important part of New Zealand's national and regional economies as well as an important contributor to environmental sustainability and climate change outcomes.

Objective 3 – Advocacy

Advocate central and local government policies and third party policies which facilitate the economic performance of plantation forestry and secure the asset.

Objective 4 – Collaboration

Encourage better outcomes for forest growing through industry collaboration to provide enhanced productivity and production and/or reduced operating costs.

FOA represents the owners of New Zealand's commercial plantation forests. The association and its members are committed to the highest standards of sustainable silviculture, environmental practice and workforce safety. Plantation forestry is science-based and highly innovative. It is New Zealand's third largest export industry and a major regional employer. It is the industry with the greatest potential to transform New Zealand into a carbon-neutral economy where all land-based industries are environmentally sustainable. Its members' forests comprise more than 75 percent of the country's 1.74 million hectares of plantation forestry.

TERMS AND THINGS

Area and volume

- A hectare (ha) = 100 x 100 metres (about the size of two rugby fields).
- A cubic metre (m³) = 1 metre x 1 metre x 1 metre (about three times the size of a household dishwasher).
- An average radiata pine tree yields 2.4 m³ 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.
- A log truck and trailer contains approximately 30 tonnes of logs.
- A log ship contains approximately 30-35,000 tonnes of logs.

Costs and values

- It costs 18 - 24 cents to truck one m³ of wood one km (for 100 km that is \$18 - \$24 per m³).
- Harvesting costs begin around \$15 - \$24 per m³ – increasing with steeper terrain, environmental sensitivities, smaller trees etc.
- Depending on market conditions, the average Radiata Pine tree when harvested is worth \$50 - \$200 to the grower.
- The Value of wood being grown (added) each year in one hectare of forest is between \$500 and \$1,500.
- 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 \$10,000 – particularly if logging and cartage costs are higher.

Note: Prices are indicative only.





CARBON EMISSIONS AND SEQUESTRATION

The carbon cycle

Planting trees begins a cycle that continuously removes, releases and reabsorbs destructive greenhouse gases such as carbon dioxide. As trees grow, they absorb carbon dioxide through the process of photosynthesis.

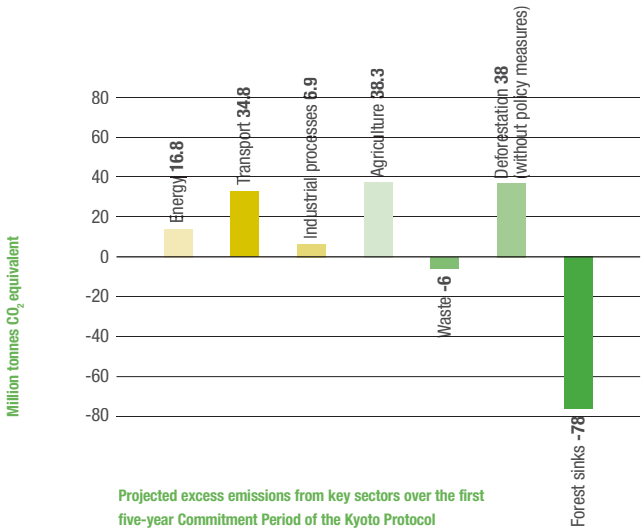
The carbon dioxide absorbed by the growing forest remains stored within the wood products used throughout the lifetime of the building structure or product.

At the end of a structure's or product's lifetime, the carbon dioxide is released back into the atmosphere when the wood decays or is burnt as fuel.

Wood can be recycled to extend its lifetime and slow down the natural release of carbon dioxide back into the atmosphere. Once the carbon dioxide is released, it is available to be re-absorbed by growing trees.

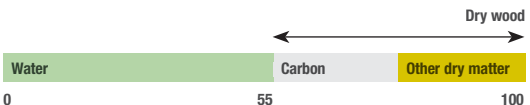
When wood materials decay or are burnt as fuel they release carbon dioxide that was absorbed during the growth of the trees and are therefore carbon neutral.

CARBON EMISSIONS BY KEY SECTORS AND FOREST SEQUESTRATION

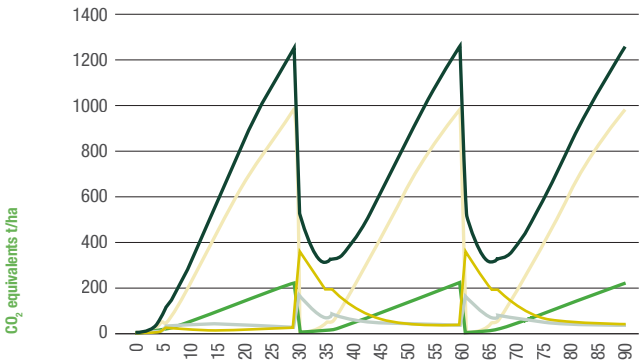


Source: Ministry for the Environment/FOA

- In 2005, forests removed 25.5 m tonnes of CO₂ from the atmosphere.
- 1 hectare sequesters approximately 25 tonnes of CO₂ per year.
- A fresh log contains about 55% water; approximately 50% of the balance is carbon.



CARBON YIELD: MULTIPLE ROTATIONS



Stand age (years)

- Total
- Above ground live biomass
- Below ground live biomass
- Dead woody litter
- Fine litter

Growth Modelling region: Waikato Taupo, Latitude 37.8, Altitude 495 m
300Index 29.0 m³/ha/year, Site index 34.8 m

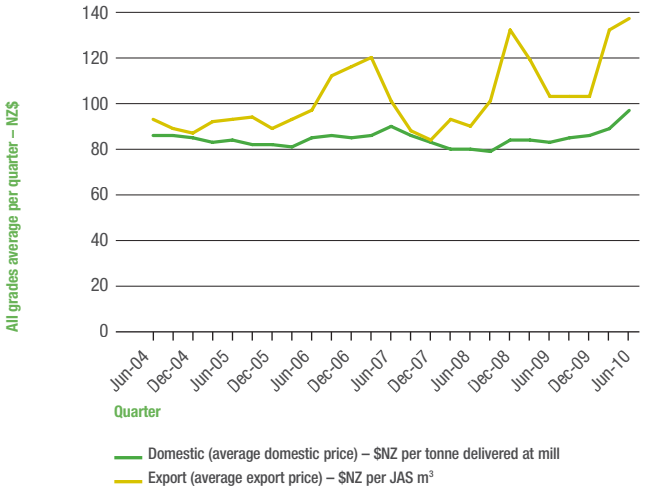
This is the classic sawtooth carbon sequestration graph for a plantation stand. It shows the sequestration and loss of carbon in the system over time. It records the gradual sequestration of carbon in the different layers (leaves, roots and litter) and the assumed release when the crop is harvested. Note the difference in release at harvesting time for the different layers, with a level of carbon being retained as sequestered, despite the crop being harvested.

The graph is for an unpruned stand, harvested age 30, waste thinned at age 6 to 450 spha.

The choice of harvest age is dependent upon the crop owner's principal stand objective (timber, carbon, etc).

Graph shows CO₂ equivalent (CO₂ tonnes = 44/12xCarbon tonnes).

EXPORT AND DOMESTIC LOG PRICING



Source: MAF



LOG PRICING DATA

Log type, pricing point and market	Jun-05	Sep-05	Dec-05	Mar-06
	Quarter	Quarter	Quarter	Quarter
Export (\$NZ per JAS m³ f.o.b)				
Pruned – Japan, Korea	133-227	145-236	139-149	128-200
A Grade – Japan	85-95r	82-93	88-93	70-99
J Grade – Japan	72-80r	53-77	72-81	76-87
K Grade – Korea	48-86	58-90	78-82	65-86
Pulp	45-62r	48-56	50-57	48-64
All grades average per quarter	93	94	89	93
Domestic (\$NZ per tonne delivered at mill)				
P1	135-147	139-143	130-137	123-140
P2	99-142r	98-108	94-128	90-129
S1	78-92	77-93	80-93	80-92
S2	60-90	74-88	73-88	63-89
L1 and L2	51-65	51-65	50-69	51-67
S3 and L3	51-76	51-77	50-74	48-73
Run of bush	..	..	..	..
Pulp	35-49	37- 49	38-50	38-51
All grades average per quarter	84	82	82	81

* Limited response – very small volume traded

.. Data not available

Source: MAF

Jun-06	Sep-06	Dec-06	Mar-07	Jun-07	Sep-07	Dec-07	Mar-08	Jun-08	Sep-08	Dec-08	Mar-09	Jun-09	Sep-09	Dec-09	Mar-10	Jun-10
Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter	Quarter
141-170	173-178	153-232	144-230	112-133	101-114	101-114	121-165	121-165	122-175	198-216	169-206	126-158	125-175	110-172	149-189	153-187
94-100	104-119	106-111	114-122	96-120	93-109	93-109	92-96	93-98	88-103	121-133	95-131	95-106	91-104	82-103	105-158	107-144
80-93	98-102	98-102	114-120	107-118	90-106	90-106	80-85	70-84	90	112	116	85	87	74	79	*
75-88	87-111	93-110	107-111	90-108	72-88	72-88	76-82	70-87	80-93	106-116	86-116	85-102	81-99	74-110	91-137	94-140
57-72	65-84	73-84	59-78	57-70	45-62	45-62	45-62	58-62	68-76	75-93	56-94	65-86	69-77	65-92	171-116	76-127
97	112	116	120	101	88	84	93	90	101	132	119	103	103	103	132	137
124-154	133-147	128-147	130-137	123-141	123-141	123-141	118-141	118-132	120-130	116-126	116-128	116-135	120-139	121-143	125-145	125-161
97-111	99-130	93-115	93-107	98-111	92-111	97-111	92-107	92-105	93-105	89-109	95-107	93-107	93-111	94-114	98-117	103-131
81-91	82-93	82-86	86-88	91-98	85-85	67-87	82-87	81-87	80-87	89-96	85-97	84-90	84-92	93-97	88-97	88-102
80-92	75-93	82-90	63-93	90-94	85-94	82-89	57-88	61-85	57-85	78-89	75-88	77-87	80-85	82-87	82-91	83-103
58-75	58-77	58-87	63-76	73-96	59-80	60-79	57-70	57-76	60-69	69-75	70-76	68-72	65-76	68-83	67-85	72-109
57-78	53-73	58-73	63-76	68-82	64-76	56-71	57-69	61-65	57-65	63-67	64-69	64-67	64-75	67-74	67-77	68-84
..
38-52	39-51	40-52	41-56	40-55	41-53	41-52	40-51	40-55	39-56	41-62	40-64	40-62	40-59	40-55	43-57	44-57
85	86	85	86	90	86	83	80	80	79	84	84	83	85	86	89	97



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