

NATIONAL EXOTIC FOREST DESCRIPTION AS AT 1 APRIL 2012



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ENQUIRIES

Further copies can be obtained from www.mpi.govt.nz.

For more information see page 72 for contacts.

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INTRODUCTION

1

This is the 29th edition of the *National Exotic Forest Description (NEFD)*. The report provides a detailed description of New Zealand's planted production forests as at 1 April 2012. It represents the net stocked area of the planted production forest estate; that is, all exotic forests planted with the primary intention of producing wood or wood fibre.

New Zealand's planted production forest description is published annually to assist with resource policy planning and development. It provides data for government policy advice, to meet a range of international reporting obligations and to assist with infrastructure planning decisions. The information is also a useful starting point for investigating wood processing opportunities in New Zealand.

The report provides:

- an overview of New Zealand's planted production forests;
- a description of survey methods, sources of information and details on the reliability of the data;
- statistical tables that describe New Zealand's planted production forest area in detail;
- forest activity data such as planting and harvesting statistics.

Much of the report's content consists of detailed tables that show the planted production forest area by age class and territorial authority. This information is provided for key species. For radiata pine, the area by age class tables are also provided by silviculture regime.

Collecting and publishing NEFD information is overseen by the NEFD Steering Committee – a forest industry committee with members nominated by the New Zealand Forest Owners Association and the Ministry for Primary Industries (see Appendix 4).

Each year the NEFD area dataset is compiled from a survey of forest owners and consultants who own or manage planted production forests. The yield tables are produced periodically based on data provided by forest owners and managers of larger forests.

An electronic copy of this report is available on the Ministry for Primary Industries website (www.mpi.govt.nz). The tables from this electronic report can be downloaded as Microsoft Excel files.

Please note this is a technical report aimed at those who have a working knowledge of New Zealand's planted production forests and who work in forestry related industries, government agencies and research institutes in New Zealand. For further clarification of the content of this report, please email stats_info@mpi.govt.nz.

OVERVIEW

2

New Zealand's net stocked planted production forests covered an estimated 1.72 million hectares as at 1 April 2012.

The total planted forest standing volume is estimated to be 488 million cubic metres with an average forest stand age (area weighted) of 16.4 years.

Table 2.1 (page 3) provides key national forestry statistics as at 1 April 2012 and compares these with statistics for 2011.

The net stocked area is unchanged from 1 April 2011. Harvested areas awaiting either replanting or a land use decision increased by 6200 hectares.

Sometimes harvested areas remain unstocked for up to three years before replanting occurs. Often these areas are not recorded year-to-year because the forest owners' tenancy ends at the completion of harvest and the land is returned to the land owners. The landowner or new tenant may not report the same areas in the NEFD survey until they are restocked. This makes it difficult to reconcile changes in forest area between years. Year-to-year changes in total forest area reported in Table 2.1 are therefore not a reliable measure of afforestation or deforestation.

Of the total forest area, the Central North Island wood supply region makes up 32 percent of the entire planted forest estate, comprising more planted forest than the entire South Island. The second and third largest areas of planted forest are in the Otago/Southland and Northland wood supply regions. See figures 8.1 and 8.2 (pages 18–19) in this report for the location of New Zealand's planted forests as identified in the New Zealand Land Use Map 1990-2008 (LUM v003).

Figure 2.1 shows the age structure of the New Zealand planted forest estate. Radiata pine is typically harvested between 26 and 32 years old. The figure shows that the areas of forest planted in the mid 1980s have now reached harvest age. Also, the large areas of forest planted between 1992 and 1998, now 14 to 20 years old, are very apparent. These areas are expected to begin reaching harvest age from around 2018.

FIGURE 2.1: TOTAL ESTIMATED PLANTED PRODUCTION FOREST AREA BY AGE CLASS, AS AT 1 APRIL 2012¹



Note

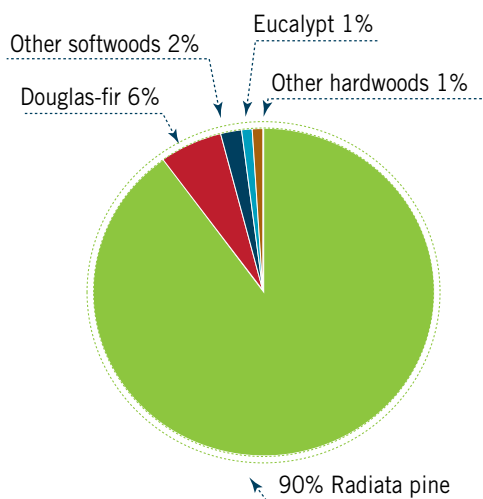
1. The area is shown for each age in single years up to 35 years. After this, age classes are aggregated.

TABLE 2.1: NATIONAL EXOTIC FOREST ESTATE STATISTICS

AREA AND STANDING VOLUME STATISTICS		AS AT 1 APRIL 2011 ¹	AS AT 1 APRIL 2012
FOREST AREA			
Net stocked area (ha)		1 719 400	1 719 500
Harvested area awaiting replanting (ha) ²		54 300	60 500
Total forest area		1 773 700	1 780 000
GROWTH CHARACTERISTICS			
Standing volume (000 m ³)		479 709	488 437
Average standing volume (m ³ /ha)		279	284
Area-weighted average age (years)		16.3	16.4
AREA BY SPECIES³			
Radiata pine (ha)		1 545 000	1 543 000
Douglas-fir (ha)		107 000	108 000
Cypress species (ha)		10 000	10 000
Other softwoods (ha)		24 000	24 000
Eucalyptus species (ha)		22 000	23 000
Other hardwoods (ha)		13 000	13 000
RADIATA PINE AREA BY TENDING REGIME			
Pruned with production thinning (ha)		210 000	207 000
Pruned without production thinning (ha)		700 000	692 000
Unpruned with production thinning (ha)		35 000	41 000
Unpruned without production thinning (ha)		599 000	603 000
PLANTING STATISTICS			
		YEAR ENDED 31 DECEMBER 2010	YEAR ENDED 31 DECEMBER 2011
NEW PLANTING⁴			
Total estimated new planting (ha) ⁵		6 000	12 000
Restocking (ha)		35 226 ⁶	39 253
HARVESTING STATISTICS⁷			
		YEAR ENDED 31 MARCH 2011	YEAR ENDED 31 MARCH 2012
HARVESTING			
Area clear felled – all species (ha)		43 300 ⁶	44 100
Area clear felled – radiata pine (ha)		39 800 ⁶	40 600
Volume clear felled – all species (000 m ³)		21 725 ⁶	23 312
Volume production thinned – all species (000 m ³)		201 ⁶	90
Total volume removed – all species (000 m ³) ⁸		21 926 ⁶	23 402
Average clear fell yield – all species (m ³ /ha)		505 ⁶	529
Volume clear felled – radiata pine (000 m ³)		20 493 ⁶	21 973
Average clear fell yield – radiata pine (m ³ /ha)		515 ⁶	541
Area-weighted average clear fell age for radiata pine (years)		28.6	28.6

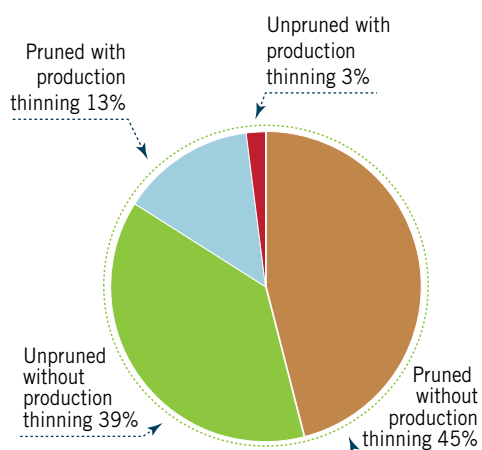
Notes

1. Source: *National Exotic Forest Description as at 1 April 2011*, Ministry of Agriculture and Forestry, 2011.
2. In this report, the area of harvested land that was recorded as awaiting a land use decision has been reported in the area awaiting replanting.
3. Individual entries may not add to totals due to rounding.
4. The forestry statistics released in this report, and in particular, new planting estimates, may differ from those produced in the Agricultural Production Survey by Statistics New Zealand. These surveys use different survey frames and designs.
5. The method used to estimate new planting is described on page 7 of this report.
6. The 2011 survey only sought data from owners with 1000 hectares of forest or more. These estimates have been rated up based on the 2010 NEFD survey results for owners with less than 1000 hectares of forest.
7. All volumes are reported as recovered volumes inside bark.
8. These estimates are based on data collected in the 2011 and 2012 NEFD surveys and may differ from the roundwood removals estimate as published in the *Annual log and roundwood removal statistics*, Ministry for Primary Industries. This is due to the estimate from that source being an indirect estimate that uses conversion factors for each forestry product to estimate the total roundwood input that would be required to produce total forest product outputs.

FIGURE 2.2: SPECIES DISTRIBUTION – 2012¹**Note**

1. Other softwoods include cypress species.

FIGURE 2.3: RADIATA PINE BY TENDING REGIME – 2012

**SPECIES**

As seen in Figure 2.2, radiata pine is the dominant species, making up 90 percent of the planted production forest area. The total planted area of eucalypt and Douglas-fir increased by 1000 hectares each in 2012. Newly planted areas of eucalypt were recorded in eastern and southern parts of the North Island while new plantings of Douglas-fir occurred in the southern South Island. The remainder of the area is planted in cypress species, other softwood species and other hardwood species.

SILVICULTURE

Figure 2.3 indicates that about 58 percent (899 000 hectares) of the radiata pine planted forest estate is, or is expected to be, pruned to a height of at least four metres. This is a slight fall from the previous year, reflecting a general trend within the industry away from intensively managed pruned regimes to unpruned structural framing regimes.

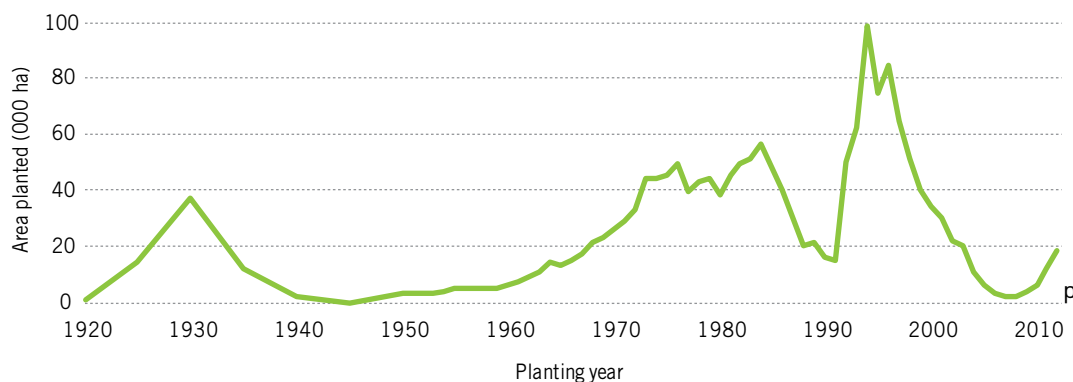
The area of production thinned forest remains at similar levels to last year at approximately 16 percent of the radiata pine planted forest. The volume of production thinning that was recorded in the year to 1 April 2012 fell to 90 000 m³ compared to 201 000 m³ in the previous year. Both market demand for production thinnings and the current age structure of forest to be thinned are likely to be factors in this decline.

FIRST ROTATION FOREST

Information collected in the 2012 survey indicates that 54 percent (940 000 ha) of the forest resource is first-rotation forest. Of the identified first-rotation forest, 47 percent is aged between 16 and 25 years. Owners with less than 1000 hectares of total forest area account for 25 percent of this resource.

PLANTING

An estimated 12 000 hectares of new forest were established in 2011. Of the new forest area established, 67 percent occurred in the central and eastern North Island. Radiata pine was the

FIGURE 2.4: NEW FOREST PLANTING 1920–2012^{p 1}

p Provisional

Note

1. This provisional estimate is compiled from a combination of information collected in a supplementary phone survey of selected large forest owners, 2012 Afforestation Grant Scheme approved planting and East Coast Forestry Project planting. The final estimate of new planting in the December 2012 year will be collected in the 2013 NEFD survey.

dominant species planted in 2011, accounting for 85 percent of new plantings. Areas of Douglas-fir, eucalypt and other softwoods were also established.

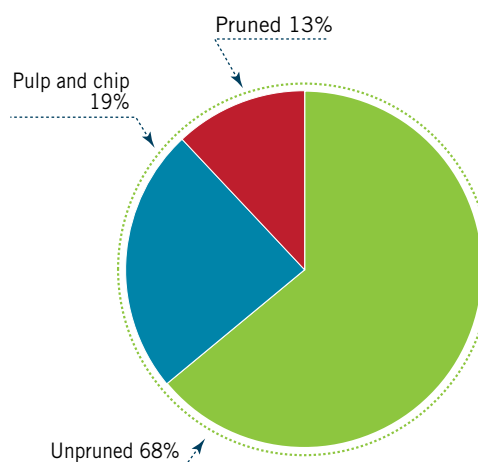
It is provisionally estimated that 18 500 hectares of new forest were established during 2012. Forest establishment relating to carbon was prominent in both 2011 and 2012 but industry comments suggest that this is not expected to continue into 2013.

An estimated 39 200 hectares of previously clear felled planted forest were replanted in year ended December 2011, representing an 11 percent increase. Some of this area was harvested prior to 1 April 2011.

HARVESTING

An estimated harvesting volume of 23.3 million cubic metres¹ for the year ended March 2012 came from clear felling 44 100 hectares of planted forest, and 0.1 million cubic metres from production thinning. A significant contributor to the increase in recovered volume from harvesting was a five percent increase in yield per hectare for radiata pine.

Of the radiata pine harvest, the proportion of both pruned and unpruned logs increased slightly balancing out the proportion of pulp and chip logs falling from 21 percent to 19 percent.

FIGURE 2.5: RADIATA PINE HARVEST VOLUME BY LOG TYPE, YEAR ENDED 31 MARCH 2012

¹ These estimates are based on data collected in the 2012 NEFD survey and may differ from the roundwood removals estimate as published in the Annual log and roundwood removal statistics, Ministry for Primary Industries. This is due to the estimate from that source being an indirect estimate that uses conversion factors for each forestry product to estimate the total roundwood input that would be required to produce total forest product outputs.

DATA

COLLECTION AND ESTIMATION

3

In 2012, NEFD questionnaires were sent to all known forest owners and managers with at least 40 hectares of planted production forest. The questionnaire used is shown in Appendix 2. Approximately 1850 questionnaires were mailed out. A response rate of 100 percent was achieved for owners with more than 1000 hectares while a response rate of 85 percent was achieved for owners with areas between 40 hectares and 1000 hectares.

In addition to the data collected in the NEFD surveys, the results from the 2004 AgriQuality (nowASUREQuality) Small Forest Grower Surveys continue to be used in the 2012 NEFD dataset. Details on the methods used by AgriQuality are available in the *Small Forest Grower Survey Report* (AgriQuality NZ, 2005).

The figures released in the *NEFD*, and in particular, new planting estimates, differ from those produced from the Agricultural Production Survey collected by Statistics New Zealand. These surveys use different survey frames and survey designs and have different survey objectives. The target population for the 2012 NEFD survey was all known forest owners and managers with at least 40 hectares of planted production forest. The target population for the 2012 Agricultural Production Survey was all businesses engaged in “agricultural production activity” (including livestock, cropping, horticulture, and forestry) or owned land that was intended for agricultural activity. Detailed information on the population frame for the 2012 Agricultural

TABLE 3.1: COMPARISON OF TOTAL NEW PLANTING WITH NEW PLANTING COLLECTED IN POSTAL SURVEYS

CALENDAR YEAR OF PLANTING	TOTAL NEW PLANTING ¹ (HA)	NEW PLANTING COLLECTED IN POSTAL SURVEYS ² (HA)	NEW PLANTING ADJUSTMENTS ³ (HA)
1992	50 200	30 900	19 300
1993	61 600	40 400	21 200
1994	98 200	68 400	29 800
1995	73 900	56 200	17 700
1996	83 600	64 600	19 000
1997	63 700	45 600	18 100
1998	51 200	36 300	14 900
1999	40 000	23 700	16 300
2000	33 600	24 700	8 900
2001	30 100	17 100	13 000
2002	22 100	14 300	7 800
2003	19 900	11 800	8 100
2004	10 600	6 200	4 400
2005	6 000	2 900	3 100
2006	2 600	1 500	1 100
2007	2 400	2 400	-
2008	1 900	1 900	-
2009	4 300	4 300	-
2010	6 000	6 000	-
2011	12 000	12 000	-

Notes

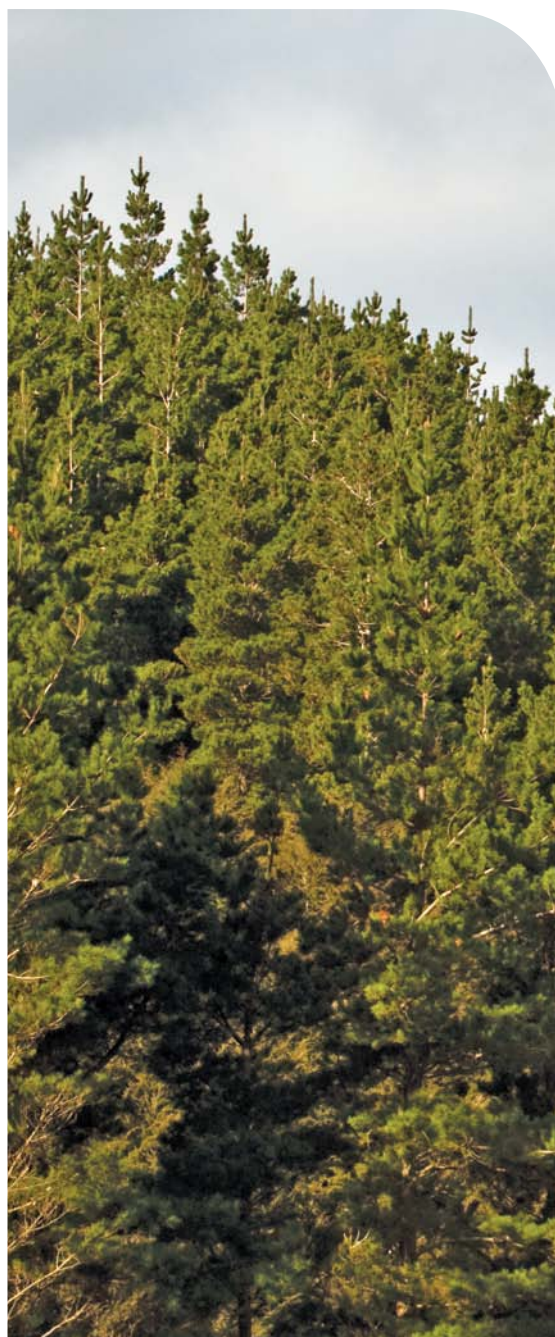
1. As estimated from the planting and nursery surveys undertaken by the Ministry for Primary Industries.
2. The area of new planting as collected in postal surveys. This does not include the area of restocking.
3. The difference between total new planting and new planting collected in postal surveys.

Production Survey is available on the Statistics New Zealand website.

The forest areas released in the *NEFD* may also differ from those produced in the New Zealand Land Use Map 1990-2008 (LUM v010). The *NEFD* reports net stocked area of planted production forest while the New Zealand Land Use Map reports gross forest area including areas that are not intended for timber production.

NEW PLANTING IMPUTATION

For the calendar years 1992 to 2006 additional new planting areas not directly captured in the *NEFD* surveys were estimated (imputed) based on the annual nursery survey. The methodology used to estimate this “missing” new planting is described in Appendix 3. No additional new planting has been added since the 2006 calendar year because of the low levels of new forest planting that have taken place in these years. Table 3.1 shows the comparisons of the new planting figures collected in the postal surveys to the total new planting figures.



DATA DESCRIPTION

4

AREA DATA

The base unit for collecting and recording area data is the crop type. Up to ten crop types are recognised for each territorial authority, made up of four tending regimes for radiata pine, two tending regimes for Douglas-fir, and one each for cypress species, eucalypt species, other softwoods and other hardwoods. For definitions of crop type and tending regime, see Appendix 1.

The area data in the NEFD dataset is organised as a net stocked area for each age by crop type, and is labelled with a crop type code and a yield table code.

The area data is rounded to the nearest hectare and is recorded for ages one to 80 years.

The crop type code defines the territorial authority, the species group and the tending regime. The crop type is referenced to a specific table in the yield table data through the yield table code. This cross-reference is used to prepare composite datasets to calculate estimates of standing volumes and for providing input data for national and regional wood availability forecasts.

YIELD TABLES

The yield tables contain yield aggregates of the same species group and tending regime which are located in the same wood supply region. The yield tables contain the total standing volume, total recoverable volume and three log type volumes (pruned logs, unpruned logs and pulp logs), together with any thinning volume, by annual age class. Each yield table is labelled with a code that defines the wood supply region, species group and tending regime.

PLANTING AND HARVESTING DATA

Data has been collected on the area of restocking, new planting and land cover before the establishment of forests. In addition, the NEFD survey collects data on harvesting, which includes the area clear felled, the volume clear felled and

the volume from production thinning for each year ended 31 March (see Table 2.1). The survey also collects data on the volume of clear felled radiata pine by generalised log types (pruned logs, unpruned logs and pulp/chip logs).

OTHER ATTRIBUTES

The NEFD dataset includes information on forest ownership, classified as:

- registered public company;
- privately owned;
- state-owned enterprise;
- local government body;
- central government;
- other forms of ownership.

Each year, the NEFD Steering Committee considers the inclusion of any other relevant attributes before requesting data from forest owners.

NEW ZEALAND LAND USE MAP

The location of New Zealand's planted forests as identified in New Zealand Land Use Map 1990-2008 (LUM v010) is shown in Figures 8.1 and 8.2 in this report. Land Use Mapping is based on interpretation of satellite imagery and aerial photography. Further details about the New Zealand Land Use Map 1990-2008 (LUM v010) are available on the Ministry for the Environment website².

The Ministry for the Environment manages the New Zealand Land Use Map 1990-2008 (LUM v010).

²

<http://www.mfe.govt.nz/issues/climate/lucas/data/land-use-mapping.html>

RELIABILITY

OF DATA

5

There are different levels of reliability associated with the net stocked area from each component of New Zealand's forest estate.

RELIABILITY OF DATA FROM LARGE-SCALE FOREST OWNERS

Large-scale forest owners (those with 1000 hectares or more) own 70 percent of the national forest estate. There are approximately 100 forest owners with more than 1000 hectares of forest.

Forest description data from large-scale owners is captured from an annual census. Data provided by these owners, and especially those with forests over 10 000 hectares, is considered the most reliable segment within the NEFD area dataset. Large-scale forest owners' forests are managed by professional staff and mapping work and forest inventories are conducted regularly in order to make well informed management decisions. The large-scale forest owners apply relatively consistent definitions of net stocked area.

RELIABILITY OF DATA FROM SMALLER SCALE OWNERS

Smaller scale forest owners with forests of less than 1000 hectares made up 30 percent of the total forest area in 2012. There are approximately 1740 forest

owners with between 40 hectares and 999 hectares of forest.

The quality of the data provided by owners with less than 1000 hectares is likely to be more variable in nature. For instance, some owners may report the total land area originally taken out of pasture and put into forest without mapping out unstocked gaps. The difference between "gross" forest area and "net stocked" area is generally of the order of 10 to 20 percent.

Data provided by owners with less than 1000 hectares is likely to have a higher degree of non-sampling error as it is more likely to contain reporting inaccuracies and responses based on forest owners' estimates. It is also generally not reported electronically, which increases the possibility of errors in reporting the data to MPI and in recording the data in the database. There is also the possibility that the survey frame contains inaccuracies, which may also contribute to non-sampling error. MPI adopts procedures to detect and minimise non-sampling error, but these errors may still occur and are not easy to quantify.

Table 5.1 shows total area represented from the 2012 NEFD survey and other NEFD data sources.

TABLE 5.1: TOTAL AREA REPRESENTED BY EACH DATA SOURCE IN THE 2012 NEFD DATABASE

DATA SOURCE	NET STOCKED AREA (000 HA)	PROPORTION OF TOTAL AREA (%)	NUMBER OF OWNERS AT NATIONAL LEVEL
DATA COLLECTED IN THE NEFD SURVEY			
NEFD survey 10 000ha+	982	57	23
NEFD survey 1000–9999ha	224	13	76
NEFD survey 40–999ha	245	14	1 739
NEFD survey total¹	1 451	84	1 838
New planting imputation (1992–2006) ²	203	12	..
2004 AgriQuality small forest growers(<40ha) ³	67	4	..
Total	1 720	100	..

Notes

¹ Data collected from 2012 NEFD survey only.

² Adjustment made this year to the area of new forest planted between 1992 and 2006. New planting imputation is discussed on page 7 of this report.

³ *Small Forest Grower Survey Report*, AgriQuality New Zealand, April 2005.

Symbol

.. Not available.

RELIABILITY OF DATA BELOW NATIONAL LEVEL

Finer scale data, such as the area by age class at a territorial authority level, is likely to be less accurate than the total national forest area.

Forest areas are sometimes misallocated between adjacent territorial authorities. One way for users to minimise this problem is to aggregate data from adjacent territorial authorities, particularly where contiguous forest areas straddle territorial authority boundaries.

NEFD SURVEYS

To minimise possible errors in the NEFD survey data, the following checks were made.

- Numeric data was limited to certain maximum and minimum values for each entry.
- Aggregated area data was checked at the territorial authority level against the 2011 NEFD area dataset to ensure variation was within acceptable limits.
- For each owner, the data provided in the 2012 survey was compared with data provided by that owner in the previous surveys.

It is possible that some owners included in the dataset may change their management objectives. For instance, an area that is reported as intended to be pruned may not end up being pruned.

YIELD TABLES

The yield tables contained in the NEFD yield table dataset were produced during 1995/96, principally from data provided in 1995 by owners of extensive areas of forest. Data was collected from these

owners because their holdings covered most districts in New Zealand, they made up much of the forest resource and they had the most suitable yield data in New Zealand. For further details on the NEFD yield tables, refer to *NEFD Regional Yield Tables as at 1 April 1995*.

An updated set of NEFD yield tables was produced as part of the new regional wood availability forecasts. Wood availability forecasts were completed in all regions and updated yield tables were released in 2010. Prior to importing the updated yield tables into the NEFD database, analysis on the impact of the updated yield tables on standing volume time series needs to be undertaken. The standing volume figures in this report continue to be calculated using the yield tables compiled in 1995.

PLANTING AND HARVESTING ESTIMATES

6

NEW PLANTING AND REPLANTING ESTIMATES

The 2011 calendar year estimate of total planting is 51 200 hectares, representing a 24 percent increase on 2010. This is made up of 12 000 hectares of new planting and 39 200 hectares of replanting. The planting estimates are based on data collected from forest owners in the 2012 NEFD survey and include areas established as part of the Afforestation Grant Scheme and East Coast Forestry Project.

Approximately 60 500 hectares of previously harvested forest awaited either replanting or a land use decision as at 1 April 2012. This represents an increase of over 6000 hectares on the previous year. It is provisionally estimated that 18 500 hectares of new planting occurred during the 2012 calendar year.

Table 6.1 shows in percentage terms the predominant land cover prior to planting since 1993.

The estimates of land cover prior to new planting are based solely on the new planting information collected in postal surveys (see Table 3.1). In some instances, postal survey respondents who had undertaken new planting did not state the land cover type prior to planting. While the sample size used to derive the proportions of land cover type prior to new planting is considered to be adequate, the estimates are biased towards the practices of the larger forest owners who are fully represented in the NEFD surveys.

For definitions of these land cover types, refer to Appendix 1.

TABLE 6.1: LAND COVER PRIOR TO NEW PLANTING

CALENDAR YEARS	IMPROVED PASTURE (%)	UNIMPROVED PASTURE (%)	OTHER WOODY VEGETATION (%)	AREA OF NEW PLANTING (HA)
1993	28	56	16	61 600
1994	49	35	16	98 200
1995	67	22	11	73 900
1996	36	50	14	83 600
1997	43	46	11	63 700
1998	44	47	9	51 200
1999	56	30	14	40 000
2000	52	31	17	33 600
2001	68	9	23	30 100
2002	31	49	20	22 100
2003	28	46	26	19 900
2004	18	46	36	10 600
2005	2	19	79	6 000
2006	2	35	63	2 600
2007	11	9	80	2 400
2008	57	2	41	1 900
2009	27	58	15	4 300
2010	64	29	6	6 000
2011	41	54	5	12 000

Note

Due to the small area of new planting in recent years and the influence of a small number of forest owners undertaking new planting, proportions of land cover types prior to planting may differ markedly between years.

HARVESTING DATA

The 2012 NEFD survey respondents recorded a harvest volume for the year ended 31 March 2011 of 23.4 million cubic metres. It is estimated that 23.3 million cubic metres came from clear felling 44 100 hectares of planted forest, and 0.1 million cubic metres from production thinning.

The total volume of radiata pine harvested in the year ended 31 March 2012 was 21.9 million cubic metres, from clear felling 40 600 hectares of forest. The area-weighted average clear fell age of radiata pine has remained unchanged at 28.6 years in the year ended 31 March 2012.

Figure 6.1 and 6.2 show the harvesting area and volume since 1990.

WOOD AVAILABILITY FORECASTS

Wood availability forecasts for all regions and New Zealand are available on the MPI website³.

These latest regional forecasts incorporated the harvesting intentions of major forest owners in each region at the time the forecasts were prepared.

³ <http://www.mpi.govt.nz/news-resources/publications.aspx>

FIGURE 6.1: HISTORICAL HARVESTING AREA 1990–2012

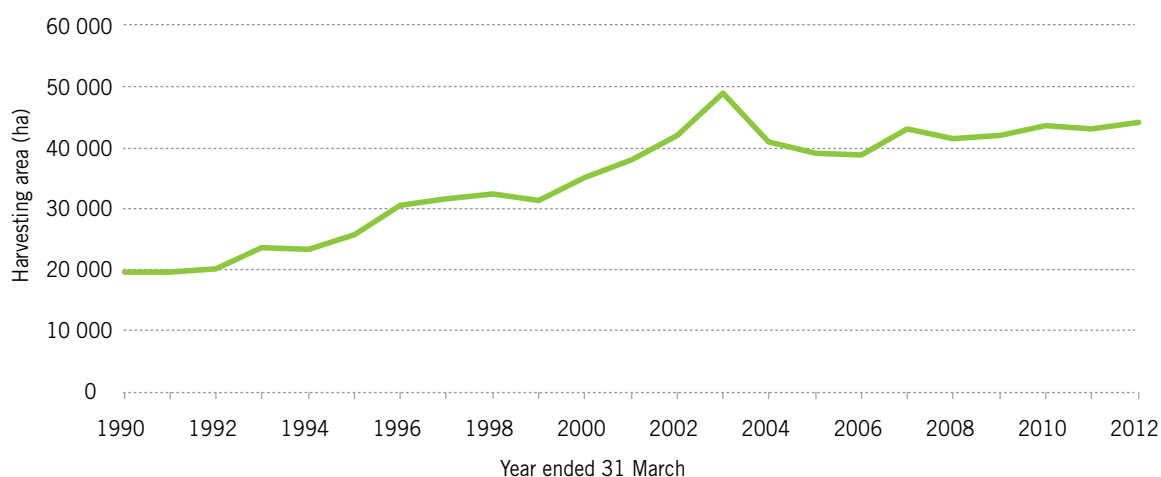
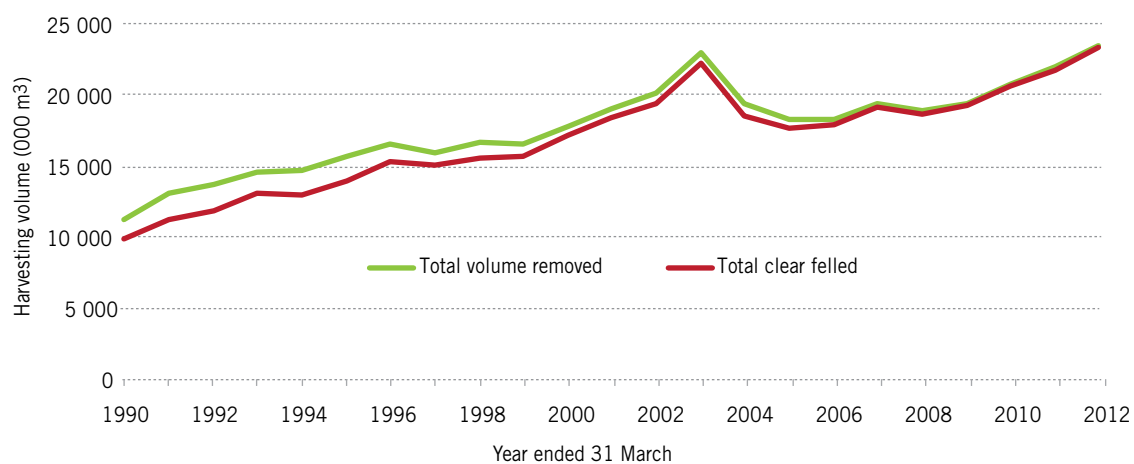


FIGURE 6.2: HISTORICAL HARVESTING VOLUME 1990–2012

WOOD SUPPLY

REGIONS AND TERRITORIAL AUTHORITIES

7

This report is based on 66 district and city councils in New Zealand. The Auckland Council was formally recognised during the year to 1 April 2011 and is reflected in this report. The councils are grouped to form 9 wood supply regions of broadly similar growth patterns for radiata pine, representing wood supply and processing catchments. The wood supply regions are: Northland, Central North Island, East Coast, Hawke's Bay, Southern North Island, Nelson and Marlborough, Canterbury, West Coast, and Otago and Southland.

TABLE 7.1: WOOD SUPPLY REGIONS AND CONSTITUENT TERRITORIAL AUTHORITIES

WOOD SUPPLY REGIONS	TERRITORIAL AUTHORITIES
NORTH ISLAND	
NORTHLAND	Far North District Whangarei District Kaipara District Auckland Council
CENTRAL NORTH ISLAND	Thames–Coromandel District Hauraki District Waikato District Matamata–Piako District Hamilton City Waipa District Otorohanga District Waitomo District Ruapehu District South Waikato District Taupo District Tauranga District Western Bay of Plenty District Rotorua District Kawerau District Whakatane District Opotiki District
EAST COAST	Gisborne District
HAWKE'S BAY	Wairoa District Hastings District Napier City Central Hawke's Bay District

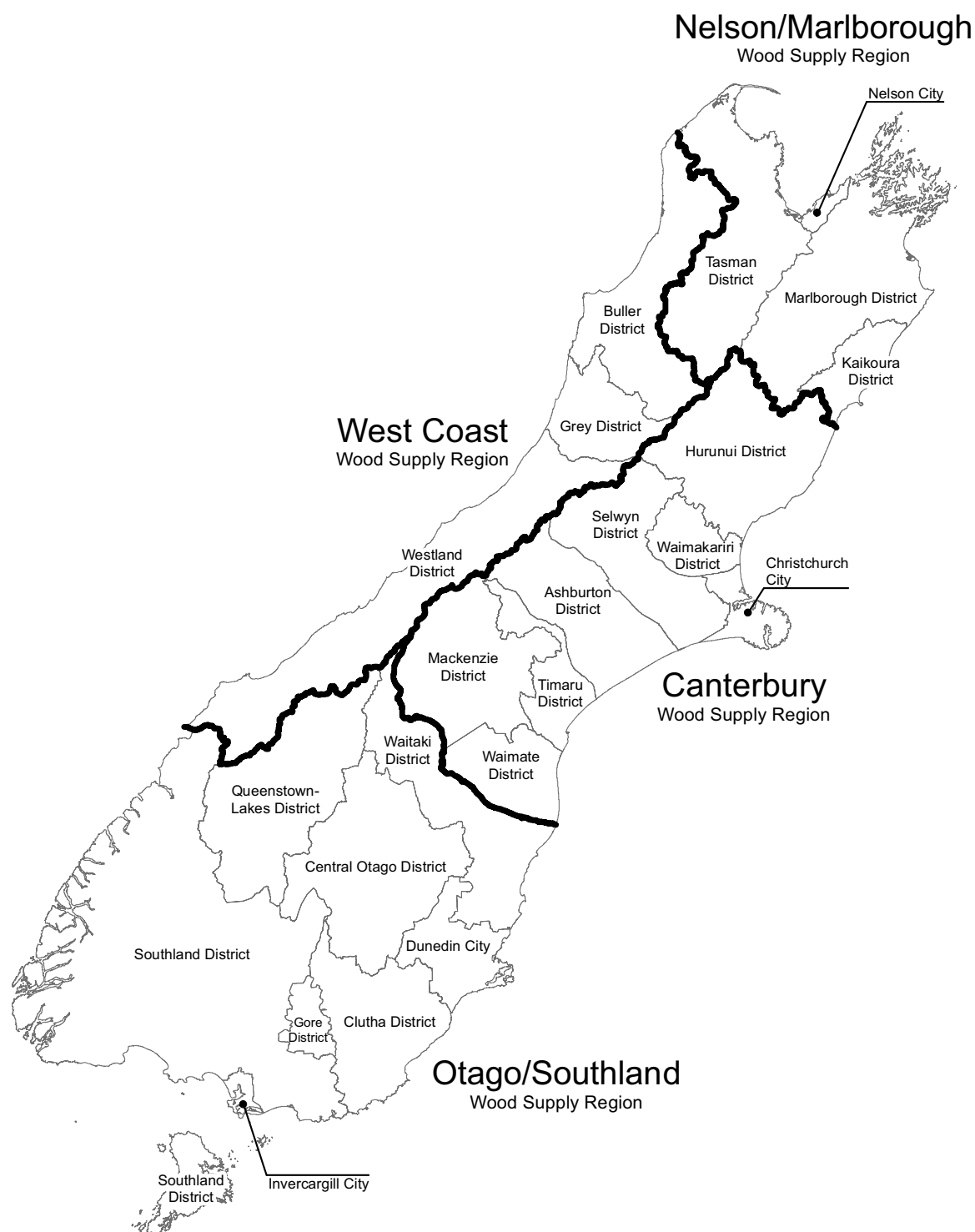
TABLE 7.1: CONTINUED

WOOD SUPPLY REGIONS	TERRITORIAL AUTHORITIES
SOUTHERN NORTH ISLAND	New Plymouth District Stratford District South Taranaki District Wanganui District Rangitikei District Manawatu District Palmerston North City Taranua District Masterton District Horowhenua District Carterton District South Wairarapa District Kapiti Coast District Upper Hutt City Porirua City Wellington City Lower Hutt City
SOUTH ISLAND	
NELSON AND MARLBOROUGH	Nelson City Tasman District Marlborough District Kaikoura District
WEST COAST	Buller District Grey District Westland District
CANTERBURY	Hurunui District Waimakariri District Christchurch City Selwyn District Ashburton District Timaru District Mackenzie District Waimate District
OTAGO AND SOUTHLAND	Waitaki District Dunedin City Queenstown-Lakes District Central Otago District Clutha District Gore District Southland District Invercargill City

FIGURE 7.1: NORTH ISLAND WOOD SUPPLY REGIONS SHOWING TERRITORIAL AUTHORITY BOUNDARIES



FIGURE 7.2: SOUTH ISLAND WOOD SUPPLY REGIONS SHOWING TERRITORIAL AUTHORITY BOUNDARIES



FOREST LOCATION

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FIGURE 8.1: DISTRIBUTION OF PLANTED FORESTS BY WOOD SUPPLY REGION – NORTH ISLAND, 2008

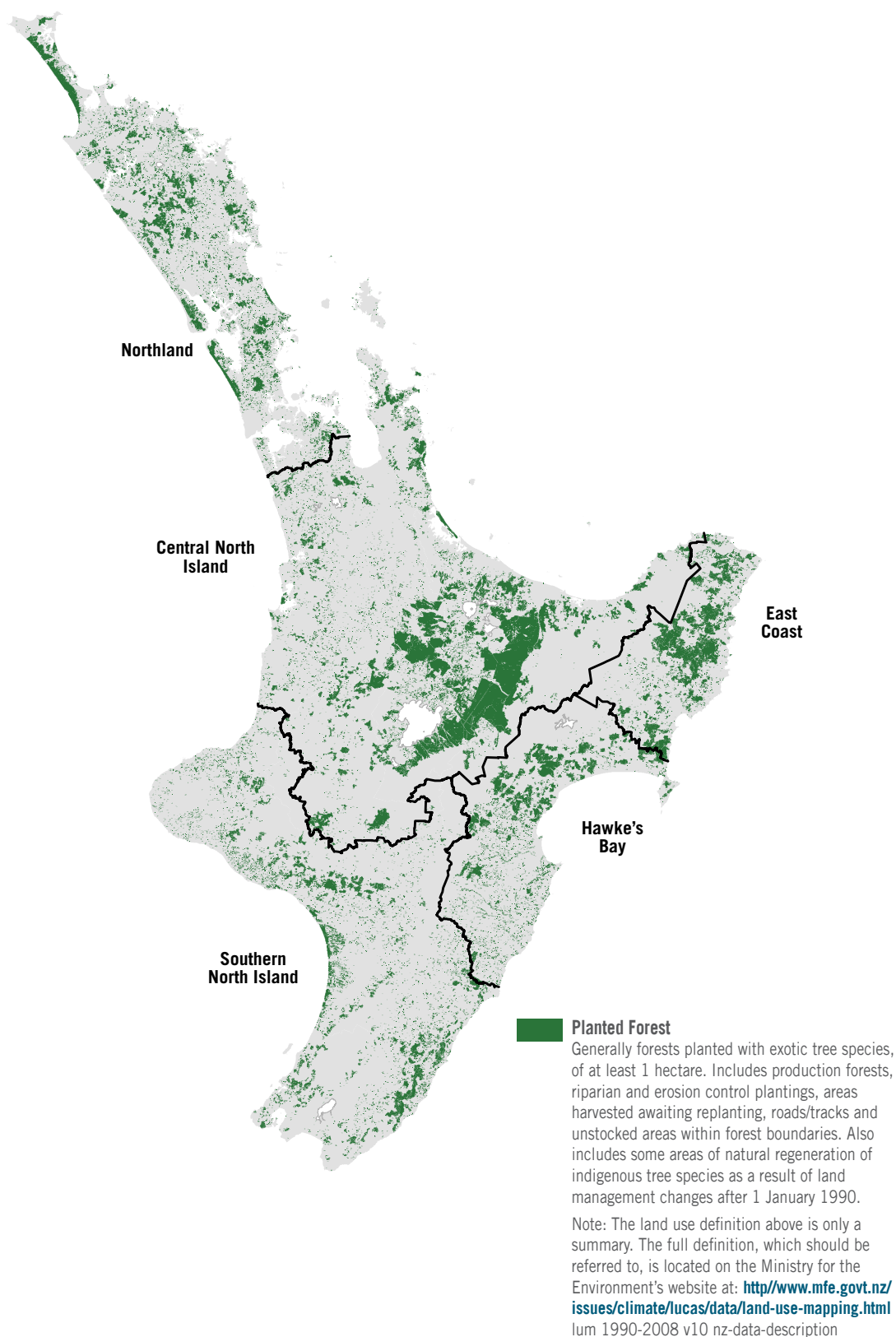
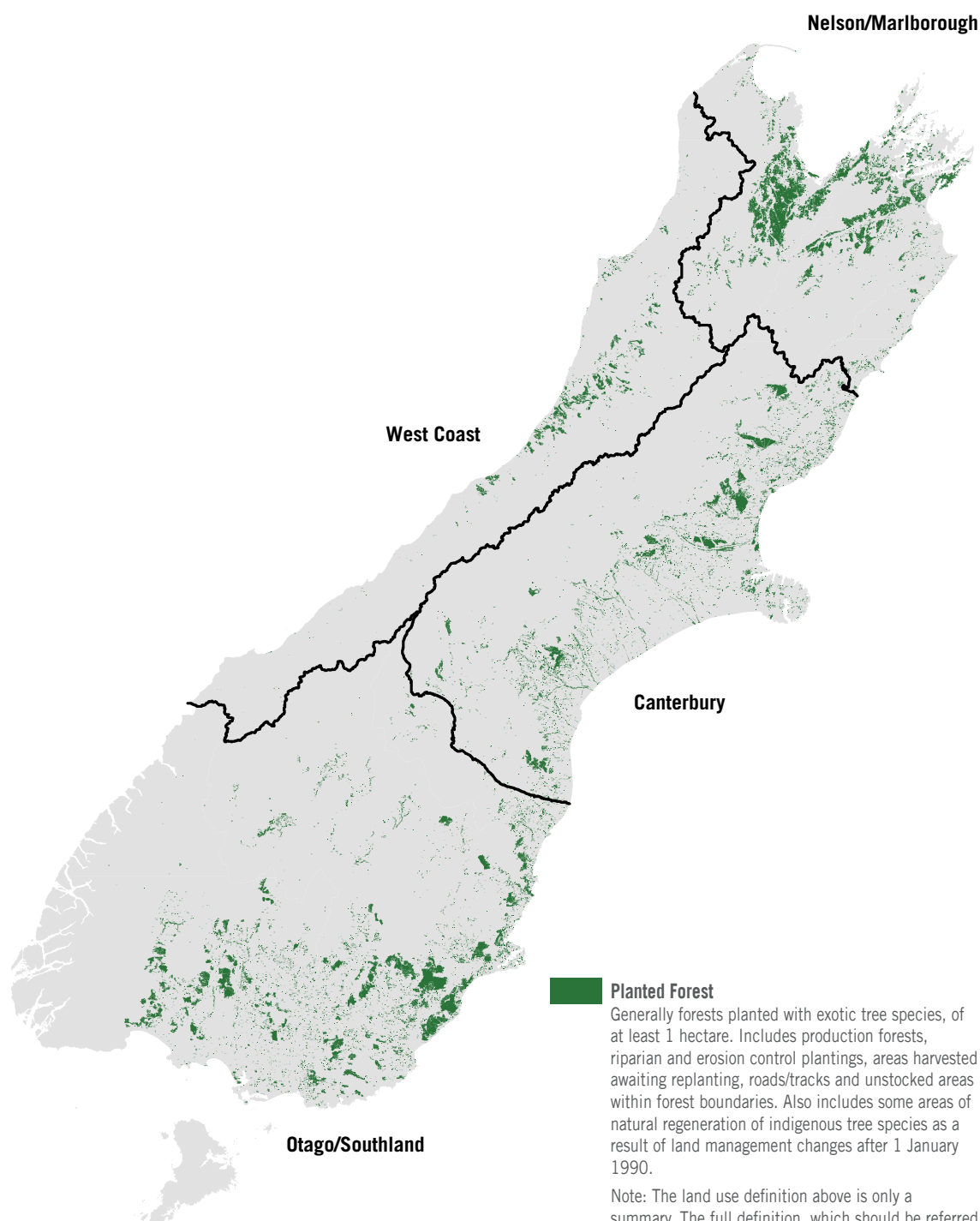


FIGURE 8.2: DISTRIBUTION OF PLANTED FORESTS BY WOOD SUPPLY REGION – SOUTH ISLAND, 2008



TABULAR SUMMARIES

AND GRAPHS

PLANTING, OWNERSHIP, NUMBER OF OWNERS AND STANDING VOLUME

TABLE 9.1: NEW LAND PLANTED IN PRODUCTION FOREST IN NEW ZEALAND¹

YEAR ENDED 31 DECEMBER	NEW LAND PLANTED (000 HA)	YEAR ENDED 31 DECEMBER	NEW LAND PLANTED (000 HA)	YEAR ENDED 31 DECEMBER	NEW LAND PLANTED (000 HA)
1920	1	1967	17	1990	16
1925	14	1968	21	1991	15
1930	37	1969	23	1992	50
1935	12	1970	26	1993	62
1940	2	1971	29	1994	98
1945	0	1972	33	1995	74
1950	3	1973	44	1996	84
1951	3	1974	44	1997	64
1952	3	1975	45	1998	51
1953	3	1976	49	1999	40
1954	4	1977	39	2000	34
1955	5	1978	43	2001	30
1956	5	1979	44	2002	22
1957	5	1980	38	2003	20
1958	5	1981	45	2004	11
1959	5	1982	49	2005	6
1960	6	1983	51	2006	3
1961	7	1984	56	2007	2
1962	9	1985	48	2008	2
1963	11	1986	40	2009	4
1964	14	1987	30	2010	6
1965	13	1988	20	2011 ²	12 ^f
1966	15	1989	21	2012 ³	19 ^p

Sources

Until 1987, the statistics were compiled by the New Zealand Forest Service. The figures for 1988 to 1991 are estimates from NEFD surveys. The figures from 1992 onwards are based on nursery surveys undertaken by the Ministry of Forestry and the Ministry of Agriculture and Forestry.

Notes

1. Prior to 1950, only five-year average annual estimates are available. The areas of new planted forests have been estimated independently from total planted forest areas shown in Table 9.2.

2. This estimate is compiled from new planting reported in the 2012 NEFD survey, 2011 Afforestation Grant Scheme approved planting (3600 hectares) and East Coast Forestry Project planting (900 hectares). In a separate survey – the 2011 Nursery Survey, it was estimated that 12 000 hectares of new planting occurred in the year ended December 2011. The new planting estimate released in the *National Exotic Forest Description* may differ from those produced in the Agricultural Production Survey by Statistics New Zealand. These surveys use different survey frames and designs.

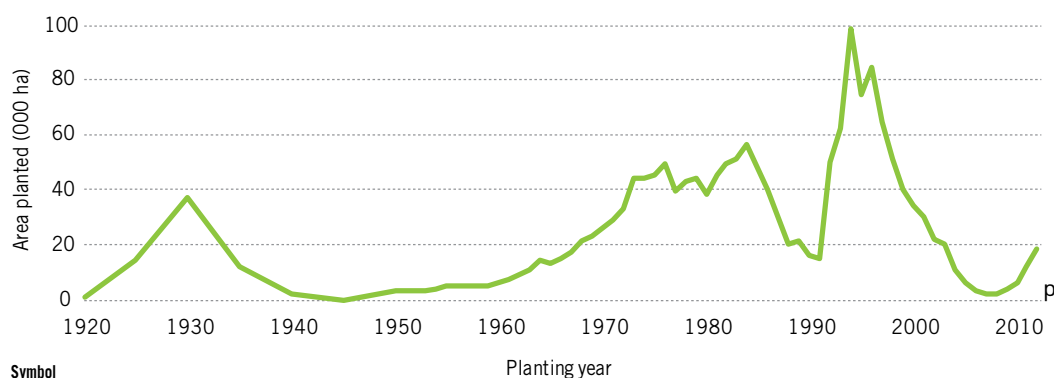
3. This provisional estimate is compiled from a combination of information collected in a supplementary phone survey of selected large forest owners and managers, 2012 Afforestation Grant Scheme approved planting (3700 hectares) and East Coast Forestry Project approved planting (900 hectares).

Symbols

f Finalised.

p Provisional.

FIGURE 9.1: NEW LAND PLANTED IN PRODUCTION FOREST IN NEW ZEALAND¹



Note

1. This provisional estimate is compiled from a combination of information collected in a supplementary phone survey of selected large forest owners, 2012 Afforestation Grant Scheme approved planting and East Coast Forestry Project planting. The final estimate of new planting in the December 2012 year will be collected in the 2013 NEFD survey.

TABLE 9.2: PLANTED PRODUCTION FOREST AREA IN NEW ZEALAND¹

YEAR ENDED 31 MARCH	PLANTED FOREST AREA			YEAR ENDED 31 MARCH	PLANTED FOREST AREA		
	STATE ² (000 HA)	PRIVATE ³ (000 HA)	TOTAL (000 HA)		STATE ² (000 HA)	PRIVATE ³ (000 HA)	TOTAL (000 HA)
1921	16	61	77	1979	449	350	799
1926	32	66	98	1980	467	379	846
1931	124	123	247	1981	484	404	888
1936	170	147	317	1982	505	434	939
1941	179	150	329	1983	526	467	993
1946	183	149	332	1984	546	499	1 045
1951	187	151	338	1985	566	529	1 095
1952	189	151	340	1986	583	548	1 131
1953	190	151	341	1987	598	556	1 154
1954	191	151	342	1988	588	626	1 214
1955	192	152	344	1989	607	633	1 240
1956	192	154	346	1990	607	654	1 261
1957	193	155	348	1991	361	928	1 289
1958	194	156	350	1992	356	952	1 308
1959	195	157	352	1993	262	1 066	1 328
1960	195	157	352	1994	267	1 121	1 388
1961	199	159	358	1995	334	1 144	1 478
1962	213	149	362	1996	330	1 212	1 542
1963	220	152	372	1997	169	1 461	1 630
1964	228	156	384	1998	169	1 510	1 679
1965	235	160	395	1999	161	1 570	1 731
1966	241	163	404	2000	151	1 618	1 769
1967	247	167	414	2001	151	1 648	1 799
1968	257	172	429	2002	148	1 666	1 814
1969	270	177	447	2003	146	1 681	1 827
1970	283	182	465	2004	143	1 679	1 822
1971	294	189	483	2005	135	1 676	1 811
1972	306	202	508	2006	125	1 675	1 800
1973	323	215	538	2007	125	1 665	1 790
1974	343	234	577	2008	127	1 634	1 761
1975	362	254	616	2009	128	1 623	1 751
1976	385	272	657	2010	123	1 615	1 738
1977	406	299	705	2011	119	1 600	1 719
1978	425	324	749	2012	113	1 607	1 720

Source

Until 1987, the statistics were compiled by the New Zealand Forest Service. The figures for 1987 onwards are estimates from NEFD surveys.

Notes

1. The total planted forest areas have been estimated independently from new planted forest areas. The areas in this table are not the accumulated sums of new forest planting shown in Table 9.1.
2. Prior to 1987, "State" refers principally to the forests planted or managed by the New Zealand Forest Service. Since 1987, "State" refers primarily to the forests owned or managed by State-owned enterprises and West Coast and Maori lease forests managed by the Ministry for Primary Industries. Since 1990 much of the state forest has been sold to the private sector.
3. Private afforestation figures are based on incomplete historical data, and considerable estimation has taken place.

FIGURE 9.2: PLANTED PRODUCTION FOREST AREA IN NEW ZEALAND

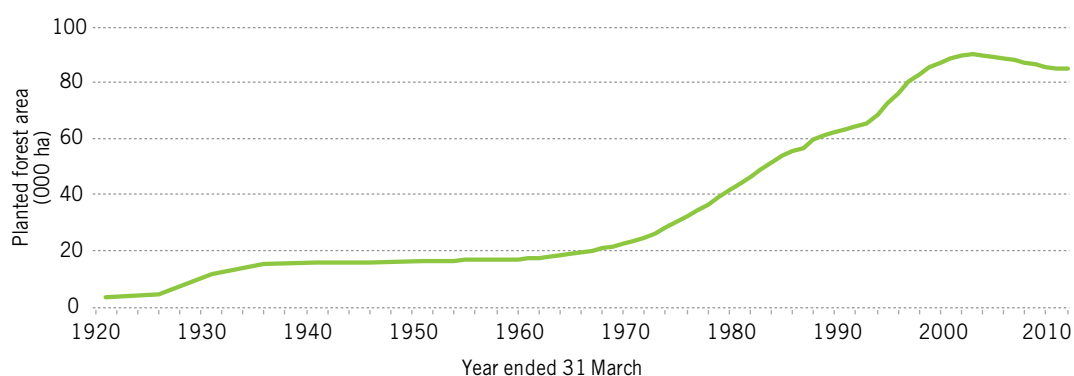


TABLE 9.3: FOREST OWNERSHIP, AS AT 1 APRIL 2012¹

OWNERSHIP CATEGORY ²	ESTIMATED TOTAL AREA (HA) ³	PERCENT OF ESTIMATED TOTAL
Registered public company ⁴	16 142	0.9
Privately owned ^{4,5}	1 590 737	92.5
State-owned enterprise	12 569	0.7
Local government	46 475	2.7
Central government ⁶	53 578	3.1
New Zealand total	1 719 501	100

Notes

1. The area of forest owned or managed by major forest owners can be found in the New Zealand Forest Industry booklet, *Facts & Figures 2011/2012*, page 9 (see the New Zealand Forest Owners Association website for more information).

2. Ownership is based solely on the ownership of the forest irrespective of the ownership of the land.

3. Net stocked planted production forest area.

4. Significant changes in forest ownership have occurred since 2003, resulting in large areas of forest previously owned by public companies now being privately owned.

5. "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.

6. "Central government" forests are predominantly Crown-owned forests on Maori lease hold land. These forests are managed by the Ministry for Primary Industries.

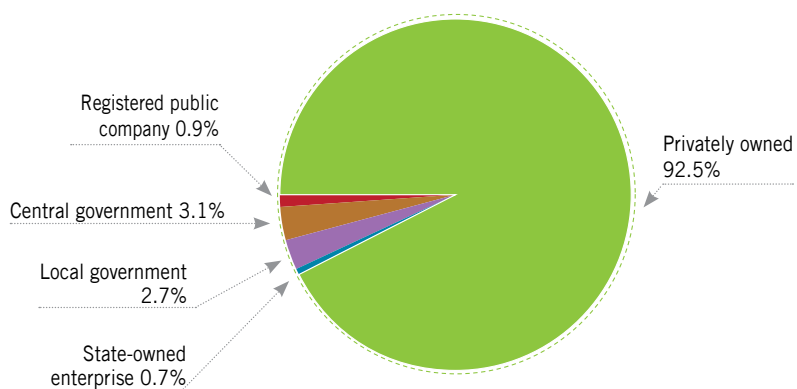
FIGURE 9.3: FOREST OWNERSHIP

TABLE 9.4: FOREST AREA¹ BY ANNUAL AGE CLASS, AS AT 1 APRIL 2012

AGE	AREA (HA)	AGE	AREA (HA)	AGE	AREA (HA)
1	50 845	29	31 513	57	83
2	40 055	30	22 666	58	98
3	34 592	31	18 382	59	127
4	33 808	32	12 500	60	140
5	36 949	33	8 839	61	43
6	34 962	34	9 673	62	383
7	39 474	35	6 317	63	89
8	47 173	36	4 418	64	54
9	57 251	37	3 861	65	58
10	58 972	38	2 735	66	21
11	64 898	39	2 142	67	38
12	65 389	40	1 815	68	72
13	67 521	41	1 309	69	19
14	74 609	42	1 576	70	20
15	87 313	43	1 488	71	21
16	104 798	44	1 110	72	150
17	95 109	45	813	73	41
18	114 390	46	719	74	64
19	80 376	47	957	75	23
20	65 678	48	1 018	76	23
21	35 971	49	489	77	39
22	36 815	50	430	78	42
23	39 913	51	345	79	57
24	33 941	52	642	80+	697
25	41 835	53	321	New Zealand total	1 719 501
26	51 545	54	170		
27	47 330	55	165		
28	39 099	56	75		

Note

1. Net stocked planted production forest area.

FIGURE 9.4: FOREST AREA BY ANNUAL AGE CLASS¹**Note**

1. The area is shown for each age in single years up to 35 years. After this, age classes are aggregated.

TABLE 9.5: NUMBER OF FOREST OWNERS BY NATIONAL SIZE CLASS¹, AS AT APRIL 2012

WOOD SUPPLY REGION	NATIONAL SIZE CLASS					
	<40 HA	40–99 HA	100–499 HA	500–999 HA	1000–9999 HA	10 000+ HA
Northland	..	133	77	14	19	4
Central North Island	..	112	92	12	22	10
East Coast	..	53	50	7	15	7
Hawke's Bay	..	62	40	5	8	10
Southern North Island	..	219	166	16	16	6
Nelson and Marlborough	..	177	114	11	13	3
West Coast	..	7	4	1	2	1
Canterbury	..	83	77	6	12	2
Otago and Southland	..	145	82	6	13	7
New Zealand total²	..	984	685	70	76	23

Notes

1. This table shows the size class of the forest owner at a national level and the regions where the owner has forests located. This does not show the size of the forest at regional level.
2. The New Zealand totals do not equal the sum of the wood supply regions because some owners have forests in more than one region. This is particularly the case for large owners in the 1000–9999 hectare and 10 000+ hectare size classes.

Symbol

.. Not available.

FIGURE 9.5: NUMBER OF FOREST OWNERS BY NATIONAL SIZE CLASS

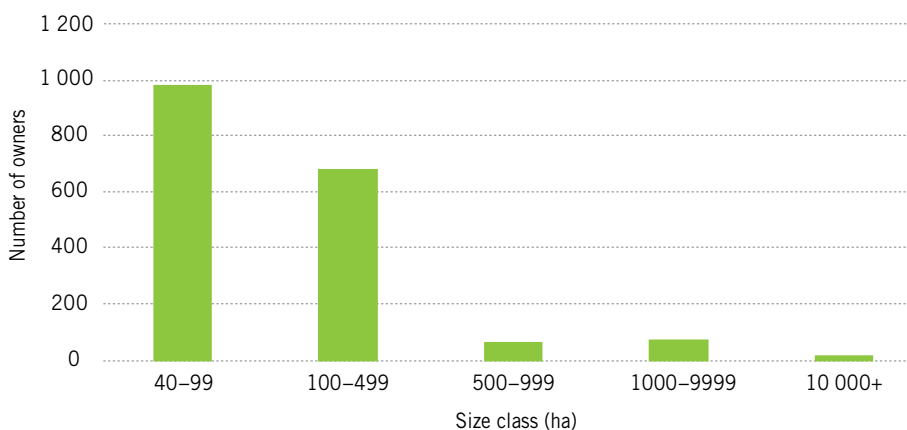


TABLE 9.6: FOREST AREA BY FOREST OWNER NATIONAL SIZE CLASS, AS AT 1 APRIL 2012

WOOD SUPPLY REGION	NATIONAL SIZE CLASS						TOTAL HA
	<40 HA	40–99 HA	100–499 HA	500–999 HA	1000–9999 HA	10 000+ HA	
Northland	42 129	8 231	13 902	8 961	47 020	82 316	202 559
Central North Island	50 111	6 728	18 456	8 087	47 677	421 038	552 097
East Coast	16 606	3 001	11 742	4 417	32 225	86 298	154 289
Hawke's Bay	21 600	3 650	8 273	2 007	11 139	82 917	129 586
Southern North Island	44 527	13 418	31 808	9 031	25 840	41 452	166 076
Nelson and Marlborough	24 503	10 633	19 775	7 961	21 271	84 442	168 585
West Coast	2 761	412	515	617	4 682	23 479	32 466
Canterbury	32 618	5 113	13 653	3 762	18 172	36 737	110 055
Otago and Southland	43 010	9 118	16 858	4 160	21 509	109 133	203 788
New Zealand total	277 865	60 304	134 982	49 003	229 535	967 812	1 719 501

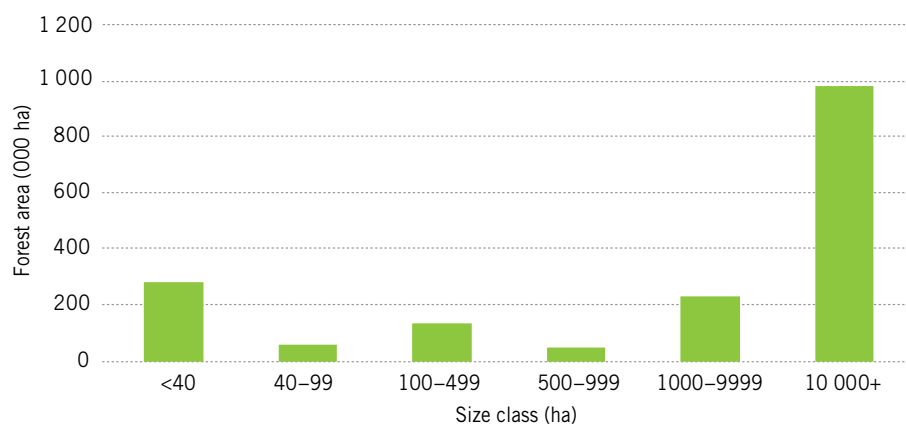
FIGURE 9.6: FOREST AREA BY NATIONAL SIZE CLASS

TABLE 9.7: FOREST AREA¹ COLLECTED BY POSTAL SURVEY AND ADJUSTMENTS FOR NEW PLANTING, AS AT 1 APRIL 2012

TERRITORIAL AUTHORITY	COLLECTED BY POSTAL SURVEYS (HA) ²	IMPUTED NEW PLANTING 1992–2006 (HA) ³	ESTIMATED TOTAL AREA (HA)
NORTHLAND WOOD SUPPLY REGION			
Far North District	83 407	8 087	91 494
Whangarei District	28 007	3 704	31 711
Kaipara District	33 525	4 829	38 354
Auckland Council	34 755	6 245	41 000
Region total	179 694	22 865	202 559
CENTRAL NORTH ISLAND WOOD SUPPLY REGION			
Thames-Coromandel District	14 956	1 376	16 332
Hauraki District	2 348	907	3 255
Waikato District	15 977	2 294	18 271
Matamata-Piako District	1 046	354	1 400
Hamilton City	1	0	1
Waipa District	1 652	1 057	2 709
Otorohanga District	2 730	2 327	5 057
South Waikato District	65 043	1 579	66 622
Waitomo District	18 892	6 759	25 651
Taupo District	162 983	6 713	169 696
Tauranga District	71	39	110
Ruapehu District	38 430	8 359	46 789
Western Bay of Plenty District	20 642	3 089	23 731
Rotorua District	46 188	5 272	51 460
Kawerau District	31	3	34
Whakatane District	100 065	4 283	104 348
Opotiki District	14 383	2 248	16 631
Region total	505 438	46 659	552 097
EAST COAST WOOD SUPPLY REGION			
Gisborne District	139 771	14 518	154 289
Region total	139 771	14 518	154 289
HAWKE'S BAY WOOD SUPPLY REGION			
Wairoa District	48 329	5 561	53 890
Hastings District	54 199	5 930	60 129
Napier City	139	0	139
Central Hawke's Bay District	11 052	4 376	15 428
Region total	113 719	15 867	129 586
SOUTHERN NORTH ISLAND WOOD SUPPLY REGION			
New Plymouth District	3 248	760	4 008
Stratford District	5 233	1 165	6 398
South Taranaki District	7 804	2 146	9 950
Wanganui District	24 731	3 584	28 315
Rangitikei District	18 318	3 593	21 911
Manawatu District	4 613	2 033	6 646
Palmerston North City	1 974	297	2 271
Horowhenua District	5 513	1 204	6 717
Tararua District	12 959	2 926	15 885
Kapiti Coast District	2 909	755	3 664
Upper Hutt City	5 600	646	6 246
Porirua City	1 355	54	1 409
Wellington City	536	38	574
Lower Hutt City	272	27	299
Masterton District	29 204	3 676	32 880
Carterton District	7 655	2 686	10 341
South Wairarapa District	6 370	2 192	8 562
Region total	138 294	27 782	166 076
North Island total	1 076 916	127 691	1 204 607

TABLE 9.7: CONTINUED...

TERRITORIAL AUTHORITY	COLLECTED BY POSTAL SURVEYS (HA) ²	IMPUTED NEW PLANTING 1992–2006 (HA) ³	ESTIMATED TOTAL AREA (HA)
NELSON AND MARLBOROUGH WOOD SUPPLY REGION			
Tasman District	80 680	5 706	86 386
Nelson City	8 437	532	8 969
Marlborough District	62 565	9 320	71 885
Kaikoura District	1 137	208	1 345
Region total	152 819	15 766	168 585
WEST COAST WOOD SUPPLY REGION			
Buller District	3 546	323	3 869
Grey District	13 644	296	13 940
Westland District	13 589	1 068	14 657
Region total	30 779	1 687	32 466
CANTERBURY WOOD SUPPLY REGION			
Hurunui District	33 766	6 312	40 078
Waimakariri District	9 340	3 118	12 458
Selwyn District	11 611	2 252	13 863
Christchurch City	7 857	3 638	11 495
Ashburton District	2 854	922	3 776
Mackenzie District	3 730	1 158	4 888
Timaru District	9 347	2 521	11 868
Waimate District	7 633	3 996	11 629
Region total	86 138	23 917	110 055
OTAGO AND SOUTHLAND WOOD SUPPLY REGION			
Waitaki District	14 245	3 884	18 129
Queenstown-Lakes District	627	130	757
Central Otago District	5 282	1 771	7 053
Dunedin City	12 977	1 374	14 351
Clutha District	69 544	11 741	81 285
Southland District	64 251	12 870	77 121
Gore District	2 594	1 810	4 404
Invercargill City	589	99	688
Region total	170 109	33 679	203 788
South Island total	439 845	75 049	514 894
New Zealand total	1 516 761	202 740	1 719 501

Notes

1. Net stocked planted production forest area.
2. Comprises the combined results from the 2012 NEFD survey and a small forest grower survey conducted by AgriQuality.
3. Adjustments made to the area of new forest planted between 1992 and 2006. New planting imputation is discussed on page 7.

FIGURE 9.7: TOTAL FOREST AREA BY WOOD SUPPLY REGION

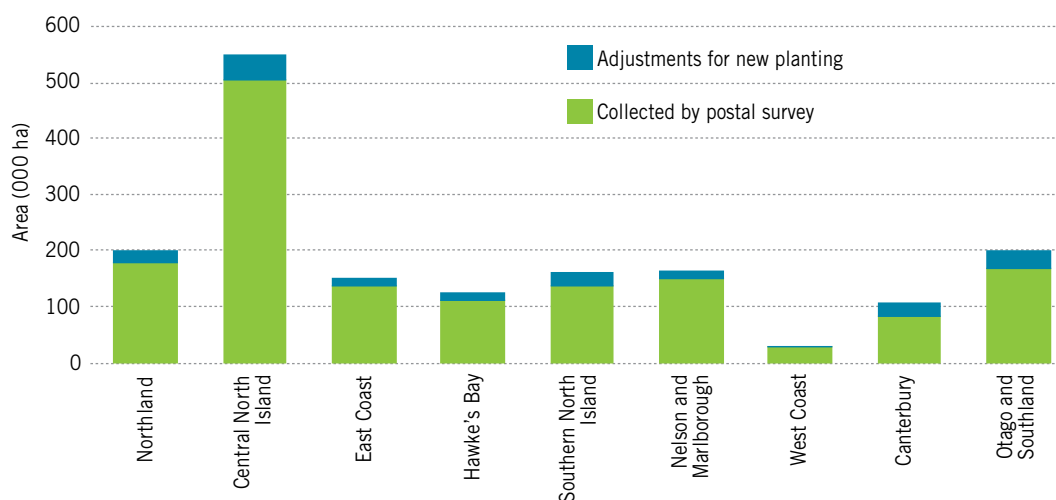


TABLE 9.8: AREA¹, STANDING VOLUME AND AREA-WEIGHTED AVERAGE AGE BY TERRITORIAL AUTHORITY, AS AT 1 APRIL 2012

TERRITORIAL AUTHORITY	AREA (HA)	STANDING VOLUME (000 M ³)	AREA-WEIGHTED AVERAGE AGE (YEARS)
NORTHLAND WOOD SUPPLY REGION			
Far North District	91 494	32 613	17.65
Whangarei District	31 711	12 469	18.02
Kaipara District	38 354	15 293	18.30
Auckland Council	41 000	12 045	15.25
Region total	202 559	72 419	17.34
CENTRAL NORTH ISLAND WOOD SUPPLY REGION			
Thames-Coromandel District	16 332	4 929	14.93
Hauraki District	3 255	1 038	17.30
Waikato District	18 271	5 100	14.85
Matamata-Piako District	1 400	407	14.98
Hamilton City	1	1	30.00
Waipa District	2 709	840	16.08
Otorohanga District	5 057	1 585	16.99
South Waikato District	66 622	20 899	15.14
Waitomo District	25 651	6 278	14.16
Taupo District	169 696	53 632	16.32
Tauranga District	110	35	17.25
Ruapehu District	46 789	16 081	17.20
Western Bay of Plenty District	23 731	7 617	16.80
Rotorua District	51 460	13 851	14.79
Kawerau District	34	12	13.65
Whakatane District	104 348	30 540	15.77
Opotiki District	16 631	8 454	21.98
Region total	552 097	171 298	16.01
EAST COAST WOOD SUPPLY REGION			
Gisborne District	154 289	52 302	17.10
Region total	154 289	52 302	17.10
HAWKE'S BAY WOOD SUPPLY REGION			
Wairoa District	53 890	12 112	14.76
Hastings District	60 129	13 625	14.83
Napier City	139	59	22.39
Central Hawke's Bay District	15 428	4 252	16.88
Region total	129 586	30 048	15.05
SOUTHERN NORTH ISLAND WOOD SUPPLY REGION			
New Plymouth District	4 008	1 220	17.10
Stratford District	6 398	2 542	20.16
South Taranaki District	9 950	3 508	18.03
Wanganui District	28 315	8 424	16.19
Rangitikei District	21 911	6 174	16.33
Manawatu District	6 646	2 461	18.88
Palmerston North City	2 271	851	17.19
Horowhenua District	6 717	2 048	17.54
Tararua District	15 885	4 753	15.92
Kapiti Coast District	3 664	1 491	19.39
Upper Hutt City	6 246	2 598	19.52
Porirua City	1 409	704	22.30
Wellington City	574	174	16.52
Lower Hutt City	299	167	25.65
Masterton District	32 880	11 632	17.85
Carterton District	10 341	3 272	16.67
South Wairarapa District	8 562	2 736	17.15
Region total	166 076	54 757	17.32
North Island total	1 204 607	380 823	16.45

TABLE 9.8: CONTINUED...

TERRITORIAL AUTHORITY	AREA (HA)	STANDING VOLUME (000 M ³)	AREA-WEIGHTED AVERAGE AGE (YEARS)
NELSON AND MARLBOROUGH WOOD SUPPLY REGION			
Tasman District	86 386	17 705	15.19
Nelson City	8 969	1 744	14.04
Marlborough District	71 885	17 503	17.13
Kaikoura District	1 345	363	18.73
Region total	168 585	37 316	15.98
WEST COAST WOOD SUPPLY REGION			
Buller District	3 869	691	15.85
Grey District	13 940	2 880	17.15
Westland District	14 657	1 849	14.65
Region total	32 466	5 420	15.87
CANTERBURY WOOD SUPPLY REGION			
Hurunui District	40 078	7 425	15.80
Waimakariri District	12 458	2 641	17.24
Selwyn District	13 863	3 316	20.14
Christchurch City	11 495	2 012	18.11
Ashburton District	3 776	777	17.92
Mackenzie District	4 888	918	19.49
Timaru District	11 868	2 048	17.40
Waimate District	11 629	1 971	17.03
Region total	110 055	21 107	17.29
OTAGO AND SOUTHLAND WOOD SUPPLY REGION			
Waitaki District	18 129	4 238	16.25
Queenstown-Lakes District	757	315	24.77
Central Otago District	7 053	1 768	20.15
Dunedin City	14 351	4 125	18.61
Clutha District	81 285	16 804	15.32
Southland District	77 121	15 238	15.29
Gore District	4 404	1 014	16.10
Invercargill City	688	269	22.78
Region total	203 788	43 770	15.87
South Island total	514 894	107 614	16.21
New Zealand total	1 719 501	488 437	16.38

Note

1. Net stocked planted production forest area.

FIGURE 9.8: STANDING VOLUME BY WOOD SUPPLY REGION

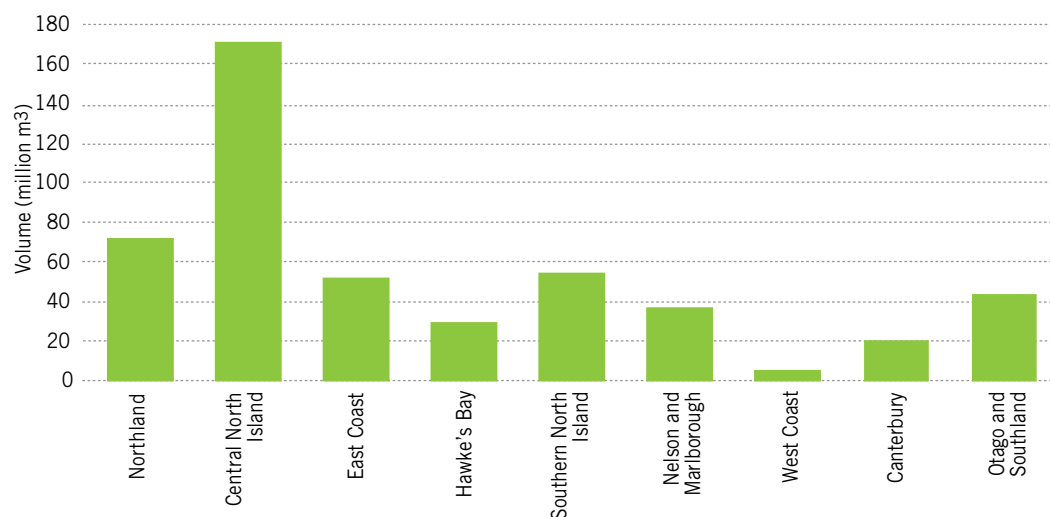


TABLE 9.9: FOREST AREA¹ BY AGE CLASS AND TERRITORIAL AUTHORITY, AS AT 1 APRIL 2012

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Northland Wood Supply Region												
Far North District	13 632	11 614	11 418	18 655	10 601	18 588	5 268	1 513	156	10	39	91 494
Whangarei District	3 444	3 359	5 534	7 024	3 530	7 383	1 026	242	144	14	11	31 711
Kaipara District	3 120	2 997	6 641	10 144	7 849	6 904	445	111	109	12	22	38 354
Auckland Council	4 644	7 628	9 015	12 088	3 122	2 338	1 425	570	131	18	21	41 000
Region total	24 840	25 598	32 608	47 911	25 102	35 213	8 164	2 436	540	54	93	202 559
Central North Island Wood Supply Region												
Thames-Coromandel District	3 716	2 887	2 199	3 118	1 569	2 067	452	163	48	38	75	16 332
Hauraki District	118	200	768	1 475	529	99	54	6	0	0	6	3 255
Waikato District	2 083	2 174	5 245	6 067	1 845	336	252	82	25	74	88	18 271
Matamata-Piako District	298	228	156	445	70	76	119	5	0	0	3	1 400
Hamilton City	0	0	0	0	0	1	0	0	0	0	0	1
Waipa District	100	192	1 198	883	98	73	145	12	5	0	3	2 709
Otorohanga District	23	974	1 231	1 922	218	439	79	37	132	0	2	5 057
South Waikato District	7 476	12 257	14 697	13 864	13 513	4 364	221	54	48	0	128	66 622
Waitomo District	4 164	3 683	6 298	8 561	859	1 163	255	275	295	97	1	25 651
Taupo District	24 562	31 543	31 040	20 357	25 934	25 824	7 887	1 437	1 020	30	62	169 696
Tauranga District	0	12	33	42	17	6	0	0	0	0	0	110
Ruapehu District	4 119	3 480	12 180	13 919	5 120	5 408	2 129	205	84	26	119	46 789
Western Bay of Plenty District	2 054	2 880	4 356	6 986	5 140	1 815	326	32	24	79	39	23 731
Rotorua District	7 628	9 933	11 896	9 070	7 792	2 760	1 074	732	353	14	208	51 460
Kawerau District	0	0	20	14	0	0	0	0	0	0	0	34
Whakatane District	13 975	13 641	25 612	23 021	13 470	9 852	3 374	773	488	97	45	104 348
Opotiki District	1 389	998	1 442	1 038	3 351	7 151	1 223	39	0	0	0	16 631
Region total	71 705	85 082	118 371	110 782	79 525	61 434	17 590	3 852	2 522	455	779	552 097
East Coast Wood Supply Region												
Gisborne District	15 381	13 568	32 007	50 471	17 046	18 603	4 858	1 007	1 168	126	54	154 289
Region total	15 381	13 568	32 007	50 471	17 046	18 603	4 858	1 007	1 168	126	54	154 289
Hawke's Bay Wood Supply Region												
Wairoa District	8 118	9 337	8 257	19 553	1 254	5 892	1 155	134	111	51	28	53 890
Hastings District	7 790	10 315	12 025	20 105	3 416	5 382	700	223	95	72	6	60 129
Napier City	0	0	0	67	13	49	5	5	0	0	0	139
Central Hawke's Bay District	784	1 202	5 381	5 396	1 127	830	371	161	64	40	72	15 428
Region total	16 692	20 854	25 663	45 121	5 810	12 153	2 231	523	270	163	106	129 586
Southern North Island Wood Supply Region												
New Plymouth District	171	309	1 243	1 381	409	341	108	42	2	0	2	4 008
Stratford District	255	585	448	3 300	471	821	79	8	198	230	3	6 398
South Taranaki District	95	692	2 631	4 059	1 493	614	276	51	29	3	7	9 950
Wanganui District	2 719	3 281	4 271	12 281	3 158	2 165	231	68	125	0	16	28 315
Rangitikei District	1 061	2 132	7 246	8 214	1 450	836	419	200	249	87	17	21 911
Manawatu District	207	593	1 016	3 142	419	603	531	102	15	4	14	6 646
Palmerston North City	619	151	142	718	96	103	304	137	1	0	0	2 271
Horowhenua District	581	1 026	791	2 727	652	451	240	101	66	50	32	6 717
Tararua District	1 884	1 220	3 493	6 671	739	1 132	469	208	51	14	4	15 885
Kapiti Coast District	63	262	834	1 275	370	594	164	99	1	2	0	3 664
Upper Hutt City	676	820	1 060	907	829	1 051	493	166	187	33	24	6 246
Porirua City	C	C	57	446	492	308	11	60	3	0	0	1 409
Wellington City	C	C	80	291	98	27	2	0	0	0	0	574
Lower Hutt City	0	0	22	90	2	56	109	20	0	0	0	299
Masterton District	2 395	3 464	5 629	12 549	2 472	4 352	1 256	304	404	37	18	32 880
Carterton District	1 039	777	3 588	2 239	1 208	681	559	124	117	C	C	10 341
South Wairarapa District	366	1 004	2 257	2 984	964	501	265	130	76	C	C	8 562
Region total	12 201	16 354	34 808	63 274	15 322	14 636	5 516	1 820	1 524	477	144	166 076
North Island total	140 819	161 456	243 457	317 559	142 805	142 039	38 359	9 638	6 024	1 275	1 176	1 204 607

TABLE 9.9: CONTINUED...

TERRITORIAL AUTHORITY	AGE CLASS (YEARS)											
	1-5 YEARS (HA)	6-10 YEARS (HA)	11-15 YEARS (HA)	16-20 YEARS (HA)	21-25 YEARS (HA)	26-30 YEARS (HA)	31-35 YEARS (HA)	36-40 YEARS (HA)	41-50 YEARS (HA)	51-60 YEARS (HA)	61-80 YEARS (HA)	TOTAL (HA)
NELSON & MARLBOROUGH WOOD SUPPLY REGION												
Tasman District	14 381	15 648	13 796	21 375	9 206	7 357	3 047	1 023	387	62	104	86 386
Nelson City	2 244	1 448	1 497	1 830	705	716	338	116	36	22	17	8 969
Marlborough District	7 967	7 798	11 344	24 462	6 196	10 291	2 892	645	227	47	16	71 885
Kaikoura District	37	88	208	744	18	111	68	31	32	8	0	1 345
Region total	24 629	24 982	26 845	48 411	16 125	18 475	6 345	1 815	682	139	137	168 585
WEST COAST WOOD SUPPLY REGION												
Buller District	871	317	331	1 373	301	421	197	10	20	4	24	3 869
Grey District	1 865	3 162	2 324	2 153	422	2 360	900	201	498	54	1	13 940
Westland District	1 988	3 054	3 521	3 390	665	1 293	374	271	73	6	22	14 657
Region total	4 724	6 533	6 176	6 916	1 388	4 074	1 471	482	591	64	47	32 466
CANTERBURY WOOD SUPPLY REGION												
Hurunui District	4 434	7 278	9 055	10 028	3 472	3 599	1 370	286	386	53	117	40 078
Waimakariri District	630	1 334	2 845	4 628	1 848	737	187	142	60	45	2	12 458
Selwyn District	1 003	689	1 633	3 679	3 711	2 013	382	421	222	82	28	13 863
Christchurch City	544	973	2 088	5 418	777	923	487	209	23	6	47	11 495
Ashburton District	398	384	790	891	396	496	129	137	79	48	28	3 776
Mackenzie District	328	415	920	1 879	328	298	231	136	239	80	34	4 888
Timaru District	603	2 554	2 123	3 082	1 568	963	440	278	200	15	42	11 868
Waimate District	803	850	3 288	4 175	768	1 138	471	32	55	31	18	11 629
Region total	8 743	14 477	22 742	33 780	12 868	10 167	3 697	1 641	1 264	360	316	110 055
OTAGO & SOUTHLAND WOOD SUPPLY REGION												
Waitaki District	760	2 519	6 500	5 055	1 282	1 350	434	117	64	33	15	18 129
Queenstown-Lakes District	3	14	71	192	140	192	103	6	9	20	7	757
Central Otago District	103	532	2 708	1 709	255	495	418	244	445	48	96	7 053
Dunedin City	2 309	812	1 436	3 575	2 119	3 257	565	146	55	27	50	14 351
Clutha District	8 132	13 992	22 572	20 734	5 945	7 004	2 041	354	295	121	95	81 285
Southland District	5 924	12 375	24 699	20 802	5 332	4 933	2 092	463	417	69	15	77 121
Gore District	103	76	2 455	1 414	113	90	84	8	56	5	0	4 404
Invercargill City	0	64	69	204	103	77	102	57	7	5	0	688
Region total	17 334	30 384	60 510	53 685	15 289	17 398	5 839	1 395	1 348	328	278	203 788
South Island total	55 430	76 376	116 273	142 792	45 670	50 114	17 352	5 333	3 885	891	778	514 894
New Zealand total	196 249	237 832	359 730	460 351	188 475	192 153	55 711	14 971	9 909	2 166	1 954	1 719 501

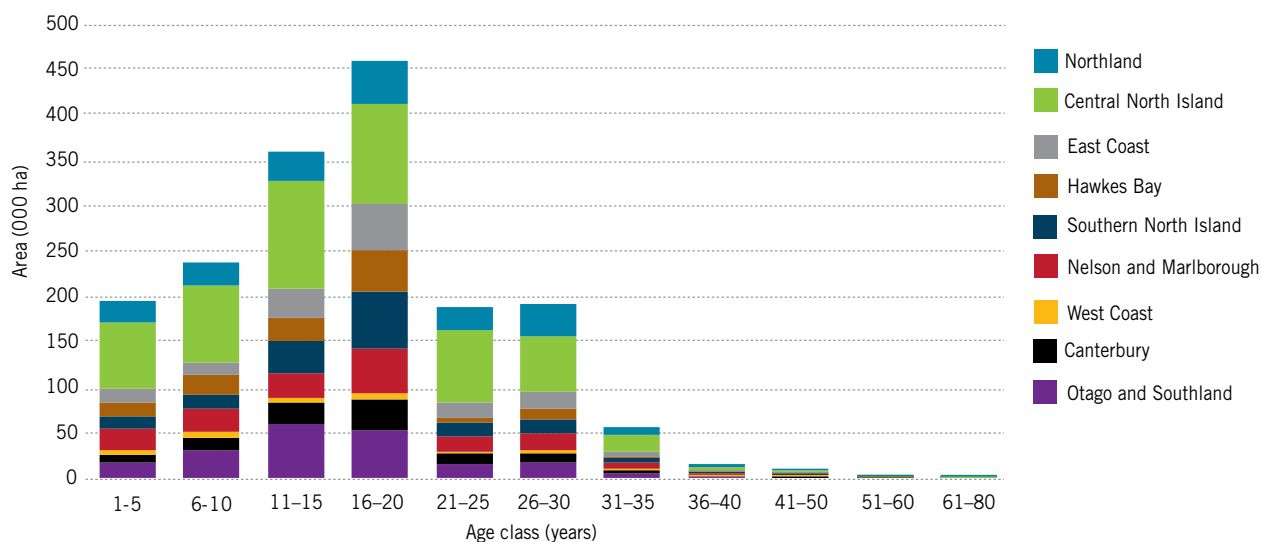
Note

1. Net stocked planted production forest area.

Symbol

C Confidential.

FIGURE 9.9: FOREST AREA BY AGE CLASS AND WOOD SUPPLY REGION





SPECIES

This section presents detailed information for each NEFD species group, showing the forest areas for each territorial authority by five-yearly age classes. Figure 9.10 provides an overview of this by illustrating the species composition by age class.

The following six tables provide information about the net stocked forest area planted in:

- Radiata pine;
- Douglas-fir;
- Cypress species;
- Other softwoods;
- Eucalypt species;
- Other hardwoods.

FIGURE 9.10: FOREST AREA BY AGE CLASS AND SPECIES, AS AT 1 APRIL 2012

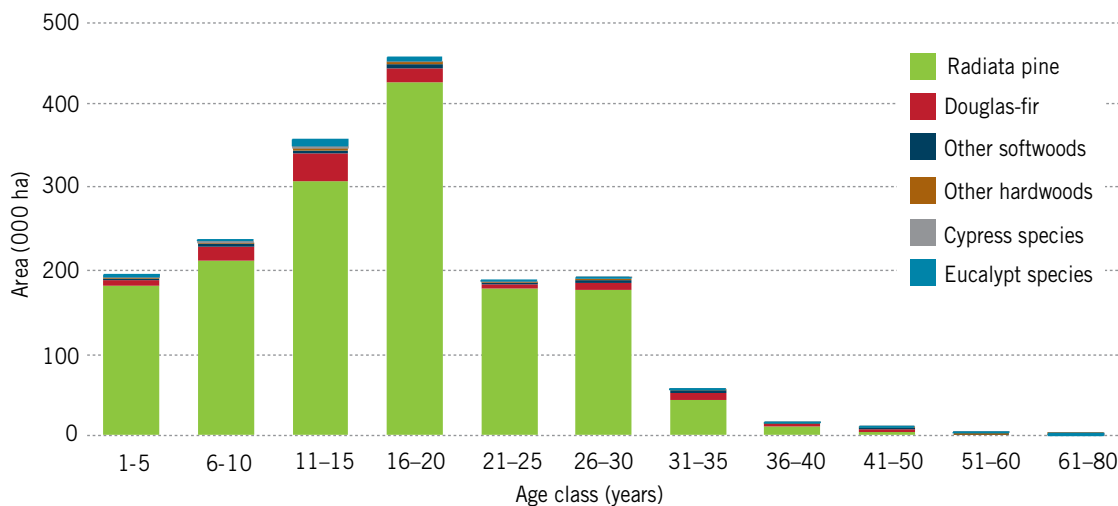


TABLE 9:10: AREA¹ PLANTED IN RADIATA PINE BY TERRITORIAL AUTHORITY, AS AT 1 APRIL 2012

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-30 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Northland Wood Supply Region												
Far North District	13 617	11 036	10 404	18 413	10 518	18 420	5 136	1 497	107	2	0	89 150
Whangarei District	3 442	3 340	5 292	6 716	3 479	7 293	935	237	131	2	3	30 870
Kaipara District	3 120	2 725	6 202	9 898	7 777	6 877	427	104	86	11	4	37 231
Auckland Council	4 585	7 451	8 716	11 731	3 015	2 236	1 345	511	109	4	11	39 714
Region total	24 764	24 552	30 614	46 758	24 789	34 826	7 843	2 349	433	19	18	196 965
Central North Island Wood Supply Region												
Thames-Coromandel District	3 716	2 879	2 192	3 051	1 542	1 905	395	146	45	11	18	15 900
Hauraki District	118	184	741	1 458	529	98	54	6	0	0	0	3 188
Waikato District	2 078	2 097	5 177	6 021	1 814	309	250	75	16	70	43	17 950
Matamata-Piako District	298	225	129	427	67	74	115	5	0	0	0	1 340
Hamilton City	0	0	0	0	0	1	0	0	0	0	0	1
Waipa District	100	151	692	818	94	70	136	12	3	0	2	2 078
Otorohanga District	0	926	1 163	1 856	184	399	79	37	0	0	0	4 644
South Waikato District	7 084	11 593	14 291	13 794	13 109	4 312	203	15	28	0	94	64 523
Waitomo District	2 886	3 336	6 103	8 235	853	1 143	192	16	0	0	0	22 764
Taupo District	23 289	30 204	29 522	19 178	24 221	24 889	7 029	208	68	30	26	158 664
Tauranga District	0	10	26	40	16	5	0	0	0	0	0	97
Ruapehu District	3 991	3 367	11 801	13 656	5 115	5 392	2 027	183	1	0	0	45 533
Western Bay of Plenty District	1 961	2 761	4 060	6 767	5 098	1 721	289	13	6	0	8	22 684
Rotorua District	7 552	9 696	10 943	8 479	7 297	2 473	308	29	42	5	22	46 846
Kawerau District	0	0	0	0	0	0	0	0	0	0	0	0
Whakatane District	13 971	13 181	24 143	21 168	12 218	8 320	2 425	200	84	36	1	95 747
Opotiki District	1 389	994	1 427	1 030	3 344	7 142	1 219	39	0	0	0	16 584
Region total	68 433	81 604	112 410	105 978	75 501	58 253	14 721	984	293	152	214	518 543
East Coast Wood Supply Region												
Gisborne District	14 244	13 115	31 268	49 793	16 905	18 280	4 575	943	123	24	8	149 278
Region total	14 244	13 115	31 268	49 793	16 905	18 280	4 575	943	123	24	8	149 278
Hawke's Bay Wood Supply Region												
Wairoa District	7 902	8 896	8 142	19 498	1 254	5 838	1 089	126	14	5	0	52 764
Hastings District	7 315	10 255	11 907	19 897	3 376	5 256	638	186	44	C	C	58 901
Napier City	0	0	0	61	13	45	5	5	0	0	0	129
Central Hawke's Bay District	784	1 172	5 312	5 349	1 085	785	362	141	43	C	C	15 059
Region total	16 001	20 323	25 361	44 805	5 728	11 924	2 094	458	101	40	18	126 853
Southern North Island Wood Supply Region												
New Plymouth District	65	221	855	1 339	394	334	105	42	1	0	0	3 356
Stratford District	246	571	429	3 239	470	814	79	6	0	0	1	5 855
South Taranaki District	93	660	2 573	4 008	1 477	602	272	51	29	3	4	9 772
Wanganui District	2 705	3 085	4 160	12 190	3 150	2 157	209	57	39	0	9	27 761
Rangitikei District	C	C	7 008	8 060	1 386	804	388	184	164	35	0	20 637
Manawatu District	207	562	934	3 094	394	541	525	99	15	2	4	6 377
Palmerston North City	606	143	141	665	95	103	304	137	1	0	0	2 195
Horowhenua District	579	1 025	779	2 651	623	404	214	75	16	37	5	6 408
Tararua District	1 614	1 200	3 433	6 652	733	859	454	197	48	14	2	15 206
Kapiti Coast District	63	258	803	1 247	367	588	163	99	1	2	0	3 591
Upper Hutt City	676	817	1 039	896	805	986	440	166	C	C	24	6 055
Porirua City	2	30	57	440	492	306	11	60	3	0	0	1 401
Wellington City	C	C	80	291	98	27	2	0	0	0	0	574
Lower Hutt City	0	0	22	88	0	56	109	20	0	0	0	295
Masterton District	2 372	3 393	5 554	12 455	2 438	4 280	1 220	300	205	19	8	32 244
Carterton District	1 039	773	3 550	2 230	1 191	675	549	116	74	3	5	10 205
South Wairarapa District	366	994	2 245	2 899	893	484	150	112	C	C	1	8 222
Region total	11 584	15 465	33 662	62 444	15 006	14 020	5 194	1 721	849	146	63	160 154
North Island total	135 026	155 059	233 315	309 778	137 929	137 303	34 427	6 455	1 799	381	321	1 151 793

TABLE 9.10: CONTINUED...

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-30 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Nelson & Marlborough Wood Supply Region												
Tasman District	14 270	15 220	12 933	19 238	8 132	5 733	1 005	349	238	12	14	77 144
Nelson City	2 237	1 441	1 456	1 792	699	637	104	13	1	0	0	8 380
Marlborough District	7 913	7 569	10 695	24 025	6 094	9 335	2 029	571	195	27	2	68 455
Kaikoura District	32	80	190	734	18	110	64	9	1	2	0	1 240
Region total	24 452	24 310	25 274	45 789	14 943	15 815	3 202	942	435	41	16	155 219
West Coast Wood Supply Region												
Buller District	618	182	167	1 310	299	389	52	3	4	0	0	3 024
Grey District	1 623	2 949	1 960	2 118	407	2 128	677	118	141	0	0	12 121
Westland District	1 441	1 235	2 073	2 043	154	421	273	261	33	1	0	7 935
Region total	3 682	4 366	4 200	5 471	860	2 938	1 002	382	178	1	0	23 080
Canterbury Wood Supply Region												
Hurunui District	3 019	5 014	8 137	8 970	3 257	2 632	533	188	115	11	7	31 883
Waimakariri District	602	1 273	2 785	4 366	1 792	703	98	36	50	39	2	11 746
Selwyn District	981	652	1 382	2 967	2 965	1 639	334	402	48	C	C	11 380
Christchurch City	544	761	1 582	3 700	697	801	454	204	16	1	23	8 783
Ashburton District	375	322	564	744	267	422	114	88	36	6	15	2 953
Mackenzie District	163	108	316	1 300	144	110	75	60	82	C	C	2 360
Timaru District	403	403	690	2 660	1 366	757	87	24	25	0	1	6 416
Waimate District	787	565	1 781	2 433	709	859	325	23	26	24	5	7 537
Region total	6 874	9 098	17 237	27 140	11 197	7 923	2 020	1 025	398	85	61	83 058
Otago & Southland Wood Supply Region												
Waitaki District	672	2 350	2 973	4 499	1 199	1 194	284	C	C	24	7	13 370
Queenstown-Lakes District	0	10	14	46	22	37	80	C	C	20	7	240
Central Otago District	5	178	254	970	96	280	122	68	11	4	70	2 058
Dunedin City	2 252	764	1 184	3 276	1 955	2 591	255	20	30	14	1	12 342
Clutha District	5 234	9 311	13 561	17 992	5 246	5 108	978	230	61	15	4	57 740
Southland District	3 551	5 909	9 548	12 617	4 170	3 875	867	382	209	16	0	41 144
Gore District	6	37	657	1 201	66	90	81	8	37	1	0	2 184
Invercargill City	0	64	69	196	97	76	101	57	7	5	0	672
Region total	11 720	18 623	28 260	40 797	12 851	13 251	2 768	878	414	99	89	129 750
South Island total	46 728	56 397	74 971	119 197	39 851	39 927	8 992	3 227	1 425	226	166	391 107
New Zealand total	181 754	211 456	308 286	428 975	177 780	177 230	43 419	9 682	3 224	607	487	1 542 900

Note

1. Net stocked planted production forest area.

Symbol

C Confidential.

FIGURE 9.11: AREA PLANTED IN RADIATA PINE BY WOOD SUPPLY REGION

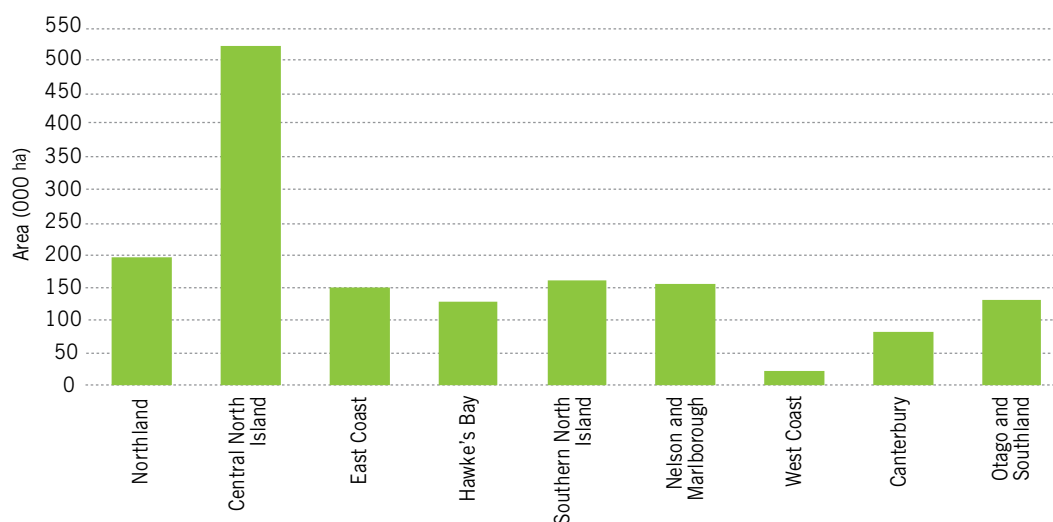


TABLE 9.11: AREA¹ PLANTED IN DOUGLAS-FIR BY TERRITORIAL AUTHORITY, AS AT 1 APRIL 2012

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Northland Wood Supply Region												
Far North District	0	0	0	2	0	0	0	2	0	0	0	4
Whangarei District	0	0	0	0	0	0	0	0	0	0	0	0
Kaipara District	0	0	0	0	0	0	0	0	0	0	0	0
Auckland Council	0	0	0	6	0	0	0	0	0	0	0	6
Region total	0	0	0	8	0	0	0	2	0	0	0	10
Central North Island Wood Supply Region												
Thames-Coromandel District	0	0	0	10	0	0	0	0	0	0	0	10
Hauraki District	0	0	0	0	0	0	0	0	0	0	0	0
Waikato District	0	0	0	1	0	1	0	0	0	0	0	2
Matamata-Piako District	0	0	4	0	0	0	0	0	0	0	0	4
Hamilton City	0	0	0	0	0	0	0	0	0	0	0	0
Waipa District	0	0	2	1	0	0	0	0	0	0	0	3
Otorohanga District	23	36	52	25	1	0	0	0	129	0	0	266
South Waikato District	73	368	7	9	0	0	0	5	9	0	7	478
Waitomo District	1 192	341	143	234	2	5	2	253	260	82	0	2 514
Taupo District	178	1 009	1 006	201	1 534	801	772	1 170	696	0	10	7 377
Tauranga District	0	0	0	0	0	0	0	0	0	0	0	0
Ruapehu District	123	91	186	100	0	2	13	19	71	25	1	631
Western Bay of Plenty District	35	3	5	8	0	1	2	18	12	2	4	90
Rotorua District	0	13	440	309	430	124	720	676	267	7	115	3 101
Kawerau District	0	0	0	0	0	0	0	0	0	0	0	0
Whakatane District	4	187	850	1 153	1 200	1 398	931	571	398	40	34	6 766
Opotiki District	0	0	0	0	0	0	0	0	0	0	0	0
Region total	1 628	2 048	2 695	2 051	3 167	2 332	2 440	2 712	1 842	156	171	21 242
East Coast Wood Supply Region												
Gisborne District	229	316	554	297	0	1	3	1	509	14	0	1 924
Region total	229	316	554	297	0	1	3	1	509	14	0	1 924
Hawke's Bay Wood Supply Region												
Wairoa District	0	29	12	1	0	0	0	6	65	10	3	126
Hastings District	0	C	18	123	0	41	18	16	33	C	0	288
Napier City	0	0	0	0	0	0	0	0	0	0	0	0
Central Hawke's Bay District	0	C	7	2	22	0	1	0	7	C	2	56
Region total	0	48	37	126	22	41	19	22	105	45	5	470
Southern North Island Wood Supply Region												
New Plymouth District	0	0	0	0	0	0	0	0	0	0	0	0
Stratford District	0	1	1	0	0	0	0	1	198	230	0	431
South Taranaki District	0	0	0	0	0	0	1	0	0	0	0	1
Wanganui District	9	0	1	1	0	0	0	2	34	0	0	47
Rangitikei District	0	4	55	52	0	1	8	1	5	6	1	133
Manawatu District	0	2	5	0	3	7	2	1	0	0	0	20
Palmerston North City	1	0	0	0	0	0	0	0	0	0	0	1
Horowhenua District	0	0	0	0	1	0	0	0	13	0	0	14
Tararua District	0	5	18	0	0	1	0	10	0	0	0	34
Kapiti Coast District	0	0	3	0	0	0	0	0	0	0	0	3
Upper Hutt City	0	2	17	1	1	7	2	0	C	C	0	35
Porirua City	0	0	0	0	0	0	0	0	0	0	0	0
Wellington City	0	0	0	0	0	0	0	0	0	0	0	0
Lower Hutt City	0	0	0	0	0	0	0	0	0	0	0	0
Masterton District	0	6	10	4	0	0	5	0	138	10	0	173
Carterton District	0	1	23	0	1	0	0	0	1	0	0	26
South Wairarapa District	0	0	0	0	0	1	0	0	C	C	0	8
Region total	10	21	133	58	6	17	18	15	399	248	1	926
North Island total	1 867	2 433	3 419	2 540	3 195	2 391	2 480	2 752	2 855	463	177	24 572

TABLE 9.11: CONTINUED...

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Nelson & Marlborough Wood Supply Region												
Tasman District	103	202	703	1 786	981	1 221	1 612	513	87	36	9	7 253
Nelson City	7	C	31	C	0	79	168	81	29	10	0	436
Marlborough District	4	80	407	163	30	681	676	43	11	6	2	2 103
Kaikoura District	5	C	11	C	0	1	0	22	31	6	0	86
Region total	119	286	1 152	1 986	1 011	1 982	2 456	659	158	58	11	9 878
West Coast Wood Supply Region												
Buller District	253	134	156	20	2	0	40	2	2	4	0	613
Grey District	127	119	274	2	0	10	51	1	251	2	0	837
Westland District	0	0	6	8	0	0	13	0	11	0	0	38
Region total	380	253	436	30	2	10	104	3	264	6	0	1 488
Canterbury Wood Supply Region												
Hurunui District	393	1 331	834	963	200	404	549	49	77	2	14	4 816
Waimakariri District	21	47	39	26	6	19	30	94	10	5	0	297
Selwyn District	C	29	177	518	654	308	37	11	136	C	C	1 944
Christchurch City	0	0	180	50	23	42	12	0	3	0	0	310
Ashburton District	21	39	143	84	51	53	15	49	43	12	2	512
Mackenzie District	C	303	568	273	112	33	97	12	6	C	C	1 549
Timaru District	185	2 120	1 354	78	88	11	350	212	107	9	29	4 543
Waimate District	9	215	1 427	1 630	26	73	33	5	17	7	7	3 449
Region total	791	4 084	4 722	3 622	1 160	943	1 123	432	399	81	63	17 420
Otago & Southland Wood Supply Region												
Waitaki District	59	149	3 427	344	19	83	109	C	C	0	0	4 195
Queenstown-Lakes District	0	4	51	124	115	145	23	C	C	0	0	470
Central Otago District	60	284	2 245	186	51	92	54	46	42	8	0	3 068
Dunedin City	55	24	235	126	68	568	268	125	24	0	16	1 509
Clutha District	2 636	4 380	7 758	2 304	547	1 412	784	102	209	57	5	20 194
Southland District	1 004	5 723	9 992	5 107	128	864	670	31	179	24	0	23 722
Gore District	0	36	1 211	69	5	0	3	0	15	4	0	1 343
Invercargill City	0	0	0	0	0	0	0	0	0	0	0	0
Region total	3 814	10 600	24 919	8 260	933	3 164	1 911	312	474	93	21	54 501
South Island total	5 104	15 223	31 229	13 898	3 106	6 099	5 594	1 406	1 295	238	95	83 287
New Zealand total	6 971	17 656	34 648	16 438	6 301	8 490	8 074	4 158	4 150	701	272	107 859

Note

1. Net stocked planted production forest area.

Symbol

C Confidential.

FIGURE 9.12: AREA PLANTED IN DOUGLAS-FIR BY WOOD SUPPLY REGION

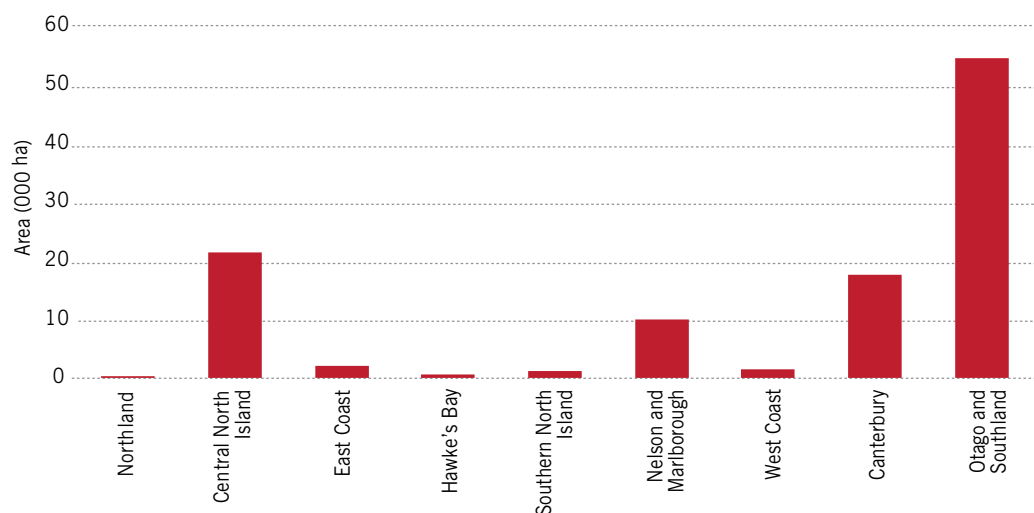


TABLE 9.12: AREA¹ PLANTED IN CYPRESS SPECIES BY TERRITORIAL AUTHORITY, AS AT 1 APRIL 2012

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Northland Wood Supply Region												
Far North District	6	20	25	42	25	4	11	6	4	0	0	143
Whangarei District	0	0	9	13	3	0	2	0	0	0	0	27
Kaipara District	0	21	0	6	0	0	3	0	0	0	0	30
Auckland Council	21	41	39	65	26	0	0	4	1	0	0	197
Region total	27	82	73	126	54	4	16	10	5	0	0	397
Central North Island Wood Supply Region												
Thames-Coromandel District	0	0	1	2	23	116	2	0	0	0	0	144
Hauraki District	0	0	0	0	0	0	0	0	0	0	0	0
Waikato District	0	0	0	0	0	2	0	0	0	0	0	2
Matamata-Piako District	0	0	0	0	0	0	0	0	0	0	0	0
Hamilton City	0	0	0	0	0	0	0	0	0	0	0	0
Waipa District	0	0	0	0	0	0	0	0	0	0	0	0
Otorohanga District	0	0	0	0	0	4	0	0	0	0	0	4
South Waikato District	2	0	0	13	9	0	0	0	0	0	0	24
Waitomo District	0	0	0	1	0	1	4	0	0	0	0	6
Taupo District	171	174	27	47	0	8	0	0	0	0	0	427
Tauranga District	0	0	0	0	0	0	0	0	0	0	0	0
Ruapehu District	0	1	0	0	0	1	0	0	0	0	12	14
Western Bay of Plenty District	21	30	2	12	0	6	2	0	4	0	0	77
Rotorua District	0	135	10	9	8	33	1	0	0	0	1	197
Kawerau District	0	0	0	0	0	0	0	0	0	0	0	0
Whakatane District	0	78	57	15	0	64	0	0	0	0	0	214
Opotiki District	0	0	0	0	1	0	0	0	0	0	0	1
Region total	194	418	97	99	41	235	9	0	4	0	13	1 110
East Coast Wood Supply Region												
Gisborne District	19	15	80	42	12	16	26	11	28	2	2	253
Region total	19	15	80	42	12	16	26	11	28	2	2	253
Hawke's Bay Wood Supply Region												
Wairoa District	0	124	54	0	0	0	0	0	0	0	0	178
Hastings District	50	20	22	7	2	0	0	0	0	0	0	101
Napier City	0	0	0	0	0	0	0	0	0	0	0	0
Central Hawke's Bay District	0	3	4	0	0	29	5	2	0	0	0	43
Region total	50	147	80	7	2	29	5	2	0	0	0	322
Southern North Island Wood Supply Region												
New Plymouth District	0	0	0	0	0	3	0	0	0	0	1	4
Stratford District	1	0	0	4	0	5	0	0	0	0	1	11
South Taranaki District	0	3	4	0	0	9	0	0	0	0	0	16
Wanganui District	C	C	0	C	0	8	1	3	15	0	0	127
Rangitikei District	C	C	2	C	4	18	7	15	71	3	0	160
Manawatu District	0	C	10	C	1	16	1	2	0	0	1	36
Palmerston North City	8	0	0	0	0	0	0	0	0	0	0	8
Horowhenua District	2	0	4	2	1	25	22	14	37	6	19	132
Tararua District	0	0	0	0	0	0	0	0	0	0	0	0
Kapiti Coast District	0	0	3	0	0	6	0	0	0	0	0	9
Upper Hutt City	0	0	1	0	2	0	0	0	0	0	0	3
Porirua City	0	0	0	0	0	0	0	0	0	0	0	0
Wellington City	0	0	0	0	0	0	0	0	0	0	0	0
Lower Hutt City	0	0	0	0	0	0	0	0	0	0	0	0
Masterton District	0	0	7	13	7	3	4	0	0	0	0	34
Carterton District	0	1	0	1	0	0	0	0	0	0	0	2
South Wairarapa District	0	2	0	0	2	0	0	0	0	0	0	4
Region total	18	125	31	39	17	93	35	34	123	9	22	546
North Island total	308	787	361	313	126	377	91	57	160	11	37	2 628

TABLE 9.12: CONTINUED...

Territorial Authority	Age Class (Years)											Total (ha)
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	
Nelson & Marlborough Wood Supply Region												
Tasman District	0	17	30	57	6	0	6	4	0	0	27	147
Nelson City	0	C	9	C	0	0	0	0	0	0	0	17
Marlborough District	12	54	49	30	14	15	5	1	0	0	5	185
Kaikoura District	0	C	0	C	0	0	0	0	0	0	0	8
Region total	12	82	88	92	20	15	11	5	0	0	32	357
West Coast Wood Supply Region												
Buller District	0	0	0	5	0	11	0	0	0	0	10	26
Grey District	41	35	89	16	9	105	10	0	0	12	1	318
Westland District	471	1 623	1 236	702	6	377	24	0	0	0	1	4 440
Region total	512	1 658	1 325	723	15	493	34	0	0	12	12	4 784
Canterbury Wood Supply Region												
Hurunui District	69	14	27	5	1	0	0	0	0	3	8	127
Waimakariri District	0	0	8	12	5	0	0	0	0	0	0	25
Selwyn District	0	0	5	6	C	0	C	0	0	0	0	12
Christchurch City	0	0	61	139	C	0	C	0	2	2	0	210
Ashburton District	0	2	15	4	4	0	0	0	0	0	0	25
Mackenzie District	0	1	0	22	0	0	0	0	0	0	0	23
Timaru District	0	14	11	12	0	5	0	0	0	0	0	42
Waimate District	0	14	5	7	13	0	0	0	0	0	0	39
Region total	69	45	132	207	27	5	3	0	2	5	8	503
Otago & Southland Wood Supply Region												
Waitaki District	1	8	14	3	13	0	0	0	0	0	5	44
Queenstown-Lakes District	0	0	0	0	0	0	0	0	0	0	0	0
Central Otago District	0	0	0	0	0	0	0	0	0	0	0	0
Dunedin City	C	C	10	62	42	22	0	0	0	0	0	154
Clutha District	174	246	213	140	79	C	C	0	1	4	6	979
Southland District	C	C	136	12	12	C	C	0	0	0	0	389
Gore District	0	0	0	0	0	0	0	0	0	0	0	0
Invercargill City	0	0	0	5	6	1	1	0	0	0	0	13
Region total	236	318	373	222	152	218	44	0	1	4	11	1 579
South Island total	829	2 103	1 918	1 244	214	731	92	5	3	21	63	7 223
New Zealand total	1 137	2 890	2 279	1 557	340	1 108	183	62	163	32	100	9 851

Note

1. Net stocked planted production forest area.

Symbol

C Confidential.

FIGURE 9.13: AREA PLANTED IN CYPRESS SPECIES BY WOOD SUPPLY REGION

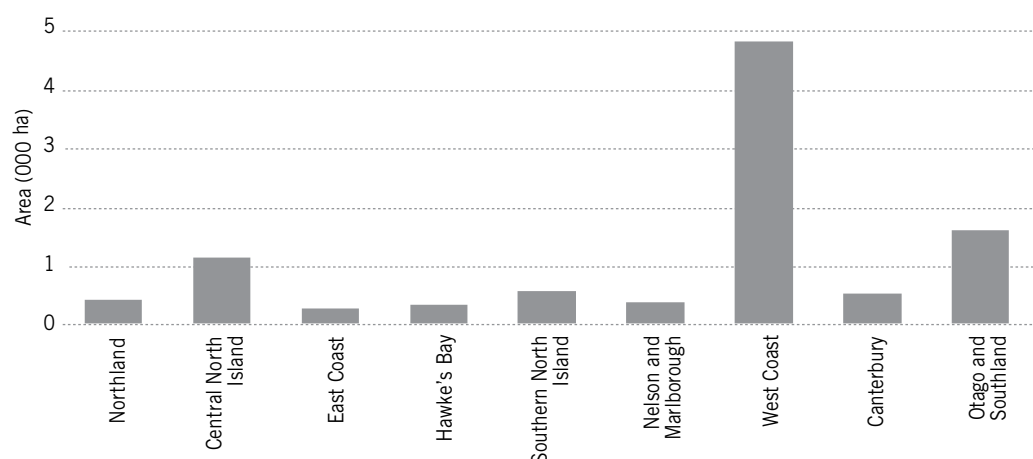


TABLE 9.13: AREA¹ PLANTED IN OTHER SOFTWOODS² BY TERRITORIAL AUTHORITY, AS AT 1 APRIL 2012

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Northland Wood Supply Region												
Far North District	2	78	101	59	19	31	7	3	27	2	36	365
Whangarei District	2	15	78	80	8	3	5	3	12	12	5	223
Kaipara District	0	11	68	10	31	13	0	1	1	1	18	154
Auckland Council	10	68	34	66	11	15	6	15	10	3	4	242
Region total	14	172	281	215	69	62	18	22	50	18	63	984
Central North Island Wood Supply Region												
Thames-Coromandel District	0	6	4	19	2	4	2	2	3	19	56	117
Hauraki District	0	16	19	0	0	1	0	0	0	0	0	36
Waikato District	C	C	55	16	C	16	0	3	9	4	44	209
Matamata-Piako District	0	3	15	4	1	1	0	0	0	0	3	27
Hamilton City	0	0	0	0	0	0	0	0	0	0	0	0
Waipa District	0	5	25	33	2	1	0	0	2	0	1	69
Otorohanga District	0	3	7	24	24	3	0	0	3	0	0	64
South Waikato District	0	0	0	2	4	24	1	30	5	0	27	93
Waitomo District	0	4	31	45	1	7	0	4	35	13	1	141
Taupo District	111	9	38	51	2	56	72	50	45	0	25	459
Tauranga District	0	0	0	0	0	0	0	0	0	0	0	0
Ruapehu District	5	20	186	161	5	11	87	3	12	1	105	596
Western Bay of Plenty District	C	C	92	110	C	1	2	0	0	8	7	267
Rotorua District	76	16	123	84	26	89	39	12	24	1	48	538
Kawerau District	0	0	0	0	0	0	0	0	0	0	0	0
Whakatane District	0	7	11	36	8	20	10	1	5	20	10	128
Opotiki District	0	0	2	3	1	0	2	0	0	0	0	8
Region total	209	160	608	588	97	234	215	105	143	66	327	2 752
East Coast Wood Supply Region												
Gisborne District	65	100	53	100	18	29	192	22	495	84	6	1 164
Region total	65	100	53	100	18	29	192	22	495	84	6	1 164
Hawke's Bay Wood Supply Region												
Wairoa District	146	153	23	53	0	7	63	2	28	36	3	514
Hastings District	30	C	33	49	C	39	32	C	16	21	1	248
Napier City	0	0	0	0	0	2	0	0	0	0	0	2
Central Hawke's Bay District	0	C	40	13	C	10	0	C	14	15	49	174
Region total	176	181	96	115	28	58	95	6	58	72	53	938
Southern North Island Wood Supply Region												
New Plymouth District	106	79	368	21	12	0	2	0	1	0	0	589
Stratford District	6	9	6	11	0	1	0	1	0	0	0	34
South Taranaki District	0	24	32	30	10	0	0	0	0	0	3	99
Wanganui District	1	90	78	55	0	0	1	6	26	0	1	258
Rangitikei District	168	371	128	33	31	6	9	0	1	8	11	766
Manawatu District	0	23	38	22	8	16	3	0	0	2	8	120
Palmerston North City	4	0	0	0	1	0	0	0	0	0	0	5
Horowhenua District	0	0	8	19	9	1	1	7	0	5	8	58
Tararua District	0	8	24	7	2	260	7	1	0	0	2	311
Kapiti Coast District	0	3	13	12	1	0	0	0	0	0	0	29
Upper Hutt City	0	1	3	7	21	45	41	0	0	9	0	127
Porirua City	0	0	0	6	0	0	0	0	0	0	0	6
Wellington City	0	0	0	0	0	0	0	0	0	0	0	0
Lower Hutt City	0	0	0	2	2	0	0	0	0	0	0	4
Masterton District	10	51	44	51	27	43	18	1	56	7	10	318
Carterton District	0	1	15	5	7	4	0	0	42	0	0	74
South Wairarapa District	0	7	11	1	4	0	1	0	0	5	0	29
Region total	295	667	768	282	135	376	83	16	126	36	43	2 827
North Island total	759	1 280	1 806	1 300	347	759	603	171	872	276	492	8 665

TABLE 9.13: CONTINUED...

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Nelson & Marlborough Wood Supply Region												
Tasman District	5	203	79	183	41	269	220	51	36	4	43	1 134
Nelson City	0	0	1	1	0	0	36	17	6	7	17	85
Marlborough District	25	60	174	128	23	139	56	17	17	13	1	653
Kaikoura District	0	0	7	0	0	0	1	0	0	0	0	8
Region total	30	263	261	312	64	408	313	85	59	24	61	1 880
West Coast Wood Supply Region												
Buller District	0	1	4	31	0	21	103	1	14	0	6	181
Grey District	0	2	1	8	0	72	140	67	106	39	0	435
Westland District	0	68	132	87	0	12	33	2	29	5	21	389
Region total	0	71	137	126	0	105	276	70	149	44	27	1 005
Canterbury Wood Supply Region												
Hurunui District	953	886	51	55	6	558	288	49	193	37	88	3 164
Waimakariri District	7	14	10	127	25	11	59	12	0	1	0	266
Selwyn District	C	6	60	161	60	56	C	C	38	33	C	443
Christchurch City	0	23	68	968	44	49	7	5	1	3	6	1 174
Ashburton District	2	21	58	38	66	12	0	0	0	30	11	238
Mackenzie District	C	3	28	254	71	139	C	C	151	67	C	880
Timaru District	15	8	43	305	106	178	3	42	27	6	2	735
Waimate District	7	56	69	78	7	202	113	4	6	0	5	547
Region total	1 009	1 017	387	1 986	385	1 205	536	183	416	177	146	7 447
Otago & Southland Wood Supply Region												
Waitaki District	28	10	79	160	1	22	15	0	5	8	0	328
Queenstown-Lakes District	3	0	6	22	3	7	0	0	3	0	0	44
Central Otago District	38	70	198	505	93	107	221	129	389	36	25	1 811
Dunedin City	C	C	6	74	29	41	42	1	1	13	18	232
Clutha District	28	43	263	272	48	158	196	13	15	27	64	1 127
Southland District	C	C	109	184	48	64	462	42	17	28	11	1 083
Gore District	0	1	18	141	0	0	0	0	4	0	0	164
Invercargill City	0	0	0	3	0	0	0	0	0	0	0	3
Region total	153	193	679	1 361	222	399	936	185	434	112	118	4 792
South Island total	1 192	1 544	1 464	3 785	671	2 117	2 061	523	1 058	357	352	15 124
New Zealand total	1 951	2 824	3 270	5 085	1 018	2 876	2 664	694	1 930	633	844	23 789

Note

1. Net stocked planted production forest area.
2. Softwoods other than radiata pine, Douglas-fir and cypresses.

Symbol

C Confidential.

FIGURE 9.14: AREA PLANTED IN OTHER SOFTWOODS BY WOOD SUPPLY REGION

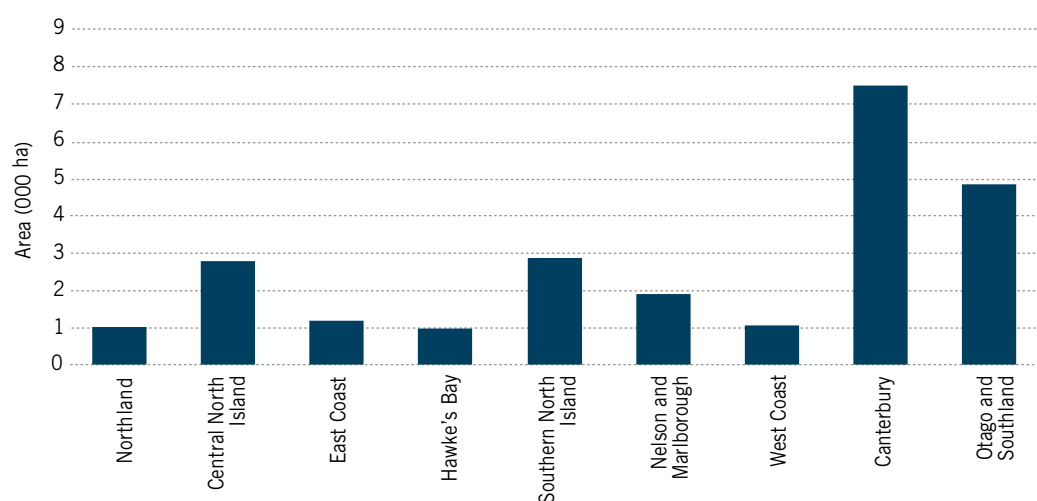


TABLE 9.14: AREA¹ PLANTED IN EUCALYPTS SPECIES BY TERRITORIAL AUTHORITY, AS AT 1 APRIL 2012

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Northland Wood Supply Region												
Far North District	7	15	8	11	7	9	43	2	1	5	0	108
Whangarei District	0	0	0	36	5	17	70	0	0	0	1	129
Kaipara District	0	0	0	151	0	3	1	1	14	0	0	170
Auckland Council	20	23	0	11	6	4	9	5	3	1	0	82
Region total	27	38	8	209	18	33	123	8	18	6	1	489
Central North Island Wood Supply Region												
Thames-Coromandel District	0	0	0	1	0	33	52	9	0	6	1	102
Hauraki District	0	0	1	0	0	0	0	0	0	0	0	1
Waikato District	0	0	0	1	0	2	0	0	0	0	0	3
Matamata-Piako District	0	0	0	0	0	0	4	0	0	0	0	4
Hamilton City	0	0	0	0	0	0	0	0	0	0	0	0
Waipa District	0	0	346	0	0	0	0	0	0	0	0	346
Otorohanga District	0	0	0	0	0	4	0	0	0	0	0	4
South Waikato District	307	267	381	14	387	28	14	0	4	0	0	1 402
Waitomo District	86	0	0	2	1	0	54	0	0	0	0	143
Taupo District	813	125	354	801	174	66	7	5	206	0	1	2 552
Tauranga District	0	0	0	0	0	0	0	0	0	0	0	0
Ruapehu District	0	0	4	0	0	2	1	0	0	0	1	8
Western Bay of Plenty District	6	41	160	14	6	31	6	1	2	68	20	355
Rotorua District	0	35	201	18	0	16	0	1	0	0	13	284
Kawerau District	0	0	20	11	0	0	0	0	0	0	0	31
Whakatane District	0	169	454	580	23	44	5	1	0	0	0	1 276
Opotiki District	0	0	0	0	0	9	2	0	0	0	0	11
Region total	1 212	637	1 921	1 442	591	235	145	17	212	74	36	6 522
East Coast Wood Supply Region												
Gisborne District	781	11	13	166	53	159	31	12	1	1	0	1 228
Region total	781	11	13	166	53	159	31	12	1	1	0	1 228
Hawke's Bay Wood Supply Region												
Wairoa District	59	116	26	0	0	0	1	0	1	0	0	203
Hastings District	277	1	3	2	1	22	1	6	1	0	0	314
Napier City	0	0	0	6	0	0	0	0	0	0	0	6
Central Hawke's Bay District	0	0	1	0	0	0	3	10	0	0	0	14
Region total	336	117	30	8	1	22	5	16	2	0	0	537
Southern North Island Wood Supply Region												
New Plymouth District	0	0	0	0	0	0	0	0	0	0	1	1
Stratford District	0	0	0	0	0	0	0	0	0	0	1	1
South Taranaki District	2	0	0	0	1	2	0	0	0	0	0	5
Wanganui District	0	0	0	0	0	0	19	0	3	0	0	22
Rangitikei District	6	3	5	10	2	5	1	0	1	0	0	33
Manawatu District	0	0	10	0	0	0	0	0	0	0	0	10
Palmerston North City	0	0	0	0	0	0	0	0	0	0	0	0
Horowhenua District	0	0	0	1	0	20	3	2	0	0	0	26
Tararua District	270	0	0	0	0	0	0	0	0	0	0	270
Kapiti Coast District	0	0	0	0	1	0	0	0	0	0	0	1
Upper Hutt City	0	0	0	0	0	0	0	0	0	0	0	0
Porirua City	0	0	0	0	0	0	0	0	0	0	0	0
Wellington City	0	0	0	0	0	0	0	0	0	0	0	0
Lower Hutt City	0	0	0	0	0	0	0	0	0	0	0	0
Masterton District	2	0	0	2	0	2	1	0	1	1	0	9
Carterton District	0	0	0	0	0	0	0	0	0	0	1	1
South Wairarapa District	0	0	0	25	25	1	105	18	0	0	0	174
Region total	280	3	15	38	29	30	129	20	5	1	3	553
North Island total	2 636	806	1 987	1 863	692	479	433	73	238	82	40	9 329

TABLE 9.14: CONTINUED...

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Nelson & Marlborough Wood Supply Region												
Tasman District	0	0	1	9	7	93	152	71	1	0	3	337
Nelson City	0	0	0	0	1	0	30	2	0	0	0	33
Marlborough District	3	15	0	1	4	89	73	3	0	0	1	189
Kaikoura District	0	0	0	0	0	0	0	0	0	0	0	0
Region total	3	15	1	10	12	182	255	76	1	0	4	559
West Coast Wood Supply Region												
Buller District	0	0	0	0	0	0	2	4	0	0	7	13
Grey District	0	0	0	3	0	0	20	15	0	1	0	39
Westland District	0	0	1	3	0	11	23	8	0	0	0	46
Region total	0	0	1	6	0	11	45	27	0	1	7	98
Canterbury Wood Supply Region												
Hurunui District	0	14	0	0	1	1	0	0	0	0	0	16
Waimakariri District	0	0	0	0	0	1	0	0	0	0	0	1
Selwyn District	0	2	0	0	C	6	0	0	0	0	C	10
Christchurch City	0	0	10	24	C	0	0	0	0	0	C	44
Ashburton District	0	0	0	0	0	3	0	0	0	0	0	3
Mackenzie District	0	0	0	0	0	14	0	0	0	0	0	14
Timaru District	0	3	0	7	3	0	0	0	0	0	0	13
Waimate District	0	0	0	0	0	2	0	0	0	0	0	2
Region total	0	19	10	31	6	27	0	0	0	0	10	103
Otago & Southland Wood Supply Region												
Waitaki District	0	0	1	0	44	39	22	0	1	1	0	108
Queenstown-Lakes District	0	0	0	0	0	0	0	0	0	0	0	0
Central Otago District	0	0	0	0	0	9	20	1	0	0	0	30
Dunedin City	0	0	0	3	18	18	0	0	0	0	0	39
Clutha District	60	5	749	0	2	C	C	6	2	0	8	1 054
Southland District	1 254	621	4 885	2 739	953	C	C	8	11	0	2	10 552
Gore District	97	0	565	0	35	0	0	0	0	0	0	697
Invercargill City	0	0	0	0	0	0	0	0	0	0	0	0
Region total	1 411	626	6 200	2 742	1 052	271	138	15	14	1	10	12 480
South Island total	1 414	660	6 212	2 789	1 070	491	438	118	15	2	31	13 240
New Zealand total	4 050	1 466	8 199	4 652	1 762	970	871	191	253	84	71	22 569

Note

1. Net stocked planted production forest area.

Symbol

C Confidential.

FIGURE 9.15: AREA PLANTED IN EUCALYPTS SPECIES BY WOOD SUPPLY REGION

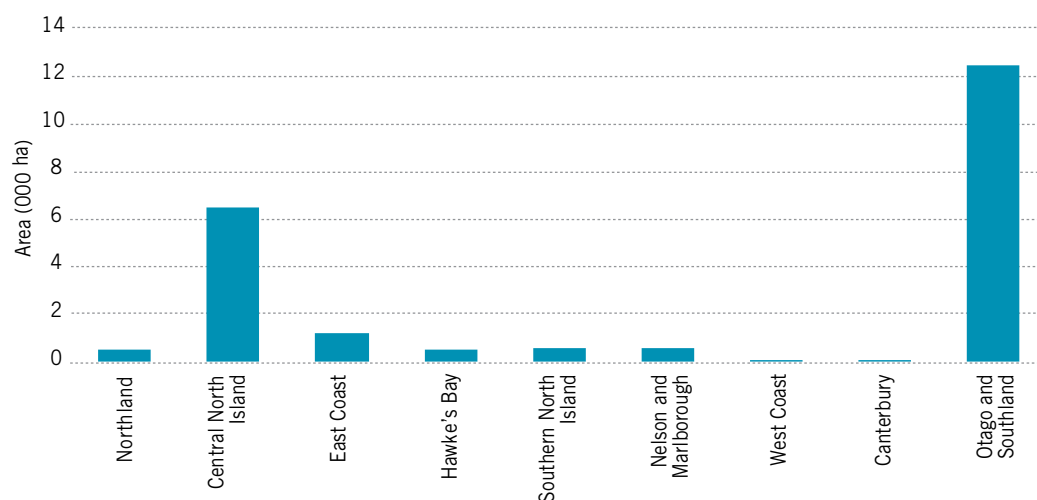


TABLE 9.15: AREA¹ PLANTED IN OTHER HARDWOODS BY TERRITORIAL AUTHORITY, AS AT 1 APRIL 2012

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Northland Wood Supply Region												
Far North District	0	465	880	128	32	124	71	3	17	1	3	1 724
Whangarei District	0	4	155	179	35	70	14	2	1	0	2	462
Kaipara District	0	240	371	79	41	11	14	5	8	0	0	769
Auckland Council	8	45	226	209	64	83	65	35	8	10	6	759
Region total	8	754	1 632	595	172	288	164	45	34	11	11	3 714
Central North Island Wood Supply Region												
Thames-Coromandel District	0	2	2	35	2	9	1	6	0	2	0	59
Hauraki District	0	0	7	17	0	0	0	0	0	0	6	30
Waikato District	C	C	13	28	C	6	2	4	0	0	1	105
Matamata-Piako District	0	0	8	14	2	1	0	0	0	0	0	25
Hamilton City	0	0	0	0	0	0	0	0	0	0	0	0
Waipa District	0	36	133	31	2	2	9	0	0	0	0	213
Otorohanga District	0	9	9	17	9	29	0	0	0	0	2	75
South Waikato District	10	29	18	32	4	0	3	4	2	0	0	102
Waitomo District	0	2	21	44	2	7	3	2	0	2	0	83
Taupo District	0	22	93	79	3	4	7	4	5	0	0	217
Tauranga District	0	2	7	2	1	1	0	0	0	0	0	13
Ruapehu District	0	1	3	2	0	0	1	0	0	0	0	7
Western Bay of Plenty District	C	C	37	75	C	55	25	0	0	1	0	258
Rotorua District	0	38	179	171	31	25	6	14	20	1	9	494
Kawerau District	0	0	0	3	0	0	0	0	0	0	0	3
Whakatane District	0	19	97	69	21	6	3	0	1	1	0	217
Opotiki District	0	4	13	5	5	0	0	0	0	0	0	27
Region total	29	215	640	624	128	145	60	34	28	7	18	1 928
East Coast Wood Supply Region												
Gisborne District	43	11	39	73	58	118	31	18	12	1	38	442
Region total	43	11	39	73	58	118	31	18	12	1	38	442
Hawke's Bay Wood Supply Region												
Wairoa District	11	19	0	1	0	47	2	0	3	0	22	105
Hastings District	118	12	42	27	C	24	11	C	1	2	C	277
Napier City	0	0	0	0	0	2	0	0	0	0	0	2
Central Hawke's Bay District	0	7	17	32	C	6	0	C	0	4	C	82
Region total	129	38	59	60	29	79	13	19	4	6	30	466
Southern North Island Wood Supply Region												
New Plymouth District	0	9	20	21	3	4	1	0	0	0	0	58
Stratford District	2	4	12	46	1	1	0	0	0	0	0	66
South Taranaki District	0	5	22	21	5	1	3	0	0	0	0	57
Wanganui District	1	C	32	C	8	0	1	0	8	0	6	100
Rangitikei District	0	C	48	C	27	2	6	0	7	35	5	182
Manawatu District	0	C	19	C	13	23	0	0	0	0	1	83
Palmerston North City	0	8	1	53	0	0	0	0	0	0	0	62
Horowhenua District	0	1	0	54	18	1	0	3	0	2	0	79
Tararua District	0	7	18	12	4	12	8	0	3	0	0	64
Kapiti Coast District	0	1	12	16	1	0	1	0	0	0	0	31
Upper Hutt City	0	0	0	3	0	13	10	0	0	0	0	26
Porirua City	0	0	0	0	0	2	0	0	0	0	0	2
Wellington City	0	0	0	0	0	0	0	0	0	0	0	0
Lower Hutt City	0	0	0	0	0	0	0	0	0	0	0	0
Masterton District	11	14	14	24	0	24	8	3	4	0	0	102
Carterton District	0	1	0	3	9	2	10	8	0	0	0	33
South Wairarapa District	0	1	1	59	40	15	9	0	0	0	0	125
Region total	14	73	199	413	129	100	57	14	22	37	12	1 070
North Island total	223	1 091	2 569	1 765	516	730	325	130	100	62	109	7 620

TABLE 9.15: CONTINUED...

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Nelson & Marlborough Wood Supply Region												
Tasman District	3	6	50	102	39	41	52	35	25	10	8	371
Nelson City	0	0	0	5	5	0	0	3	0	5	0	18
Marlborough District	10	20	19	115	31	32	53	10	4	1	5	300
Kaikoura District	0	0	0	0	0	0	3	0	0	0	0	3
Region total	13	26	69	222	75	73	108	48	29	16	13	692
West Coast Wood Supply Region												
Buller District	0	0	4	7	0	0	0	0	0	0	1	12
Grey District	74	57	0	6	6	45	2	0	0	0	0	190
Westland District	76	128	73	547	505	472	8	0	0	0	0	1 809
Region total	150	185	77	560	511	517	10	0	0	0	1	2 011
Canterbury Wood Supply Region												
Hurunui District	0	19	6	35	7	4	0	0	1	0	0	72
Waimakariri District	0	0	3	97	20	3	0	0	0	0	0	123
Selwyn District	0	0	9	27	C	4	C	C	0	3	C	74
Christchurch City	0	189	187	537	C	31	C	0	1	0	C	974
Ashburton District	0	0	10	21	8	6	0	0	0	0	0	45
Mackenzie District	0	0	8	30	1	2	C	C	0	9	9	62
Timaru District	0	6	25	20	5	12	0	0	41	0	10	119
Waimate District	0	0	6	27	13	2	0	0	6	0	1	55
Region total	0	214	254	794	93	64	15	1	49	12	28	1 524
Otago & Southland Wood Supply Region												
Waitaki District	0	2	6	49	6	12	4	2	0	0	3	84
Queenstown-Lakes District	0	0	0	0	0	3	0	0	0	0	0	3
Central Otago District	0	0	11	48	15	7	1	0	3	0	1	86
Dunedin City	0	1	1	34	7	17	0	0	0	0	15	75
Clutha District	0	7	28	26	23	39	32	3	7	18	8	191
Southland District	0	12	29	143	21	17	5	0	1	1	2	231
Gore District	0	2	4	3	7	0	0	0	0	0	0	16
Invercargill City	0	0	0	0	0	0	0	0	0	0	0	0
Region total	0	24	79	303	79	95	42	5	11	19	29	686
South Island total	163	449	479	1 879	758	749	175	54	89	47	71	4 913
New Zealand total	386	1 540	3 048	3 644	1 274	1 479	500	184	189	109	180	12 533

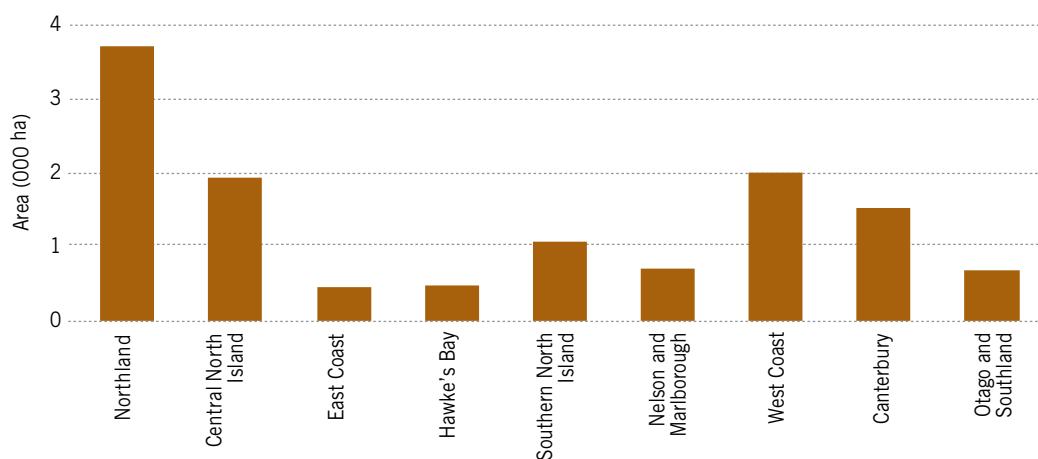
Note

1. Net stocked planted production forest area.

Symbol

C Confidential.

FIGURE 9.16: AREA PLANTED IN OTHER HARDWOODS BY WOOD SUPPLY REGION





RADIATA PINE TENDING REGIME

This section presents detailed information for each radiata pine NEFD tending regime, showing the forest area for each territorial authority by five-yearly age class. Figure 9.17 provides an overview of this, illustrating the radiata pine tending regime breakdown by age class.

The four tables that follow show the area:

- Pruned with production thinning;
- Pruned without production thinning;
- Unpruned with production thinning;
- Unpruned without production thinning.

FIGURE 9.17: RADIATA PINE FOREST AREA BY AGE CLASS AND TENDING REGIME, AS AT 1 APRIL 2012

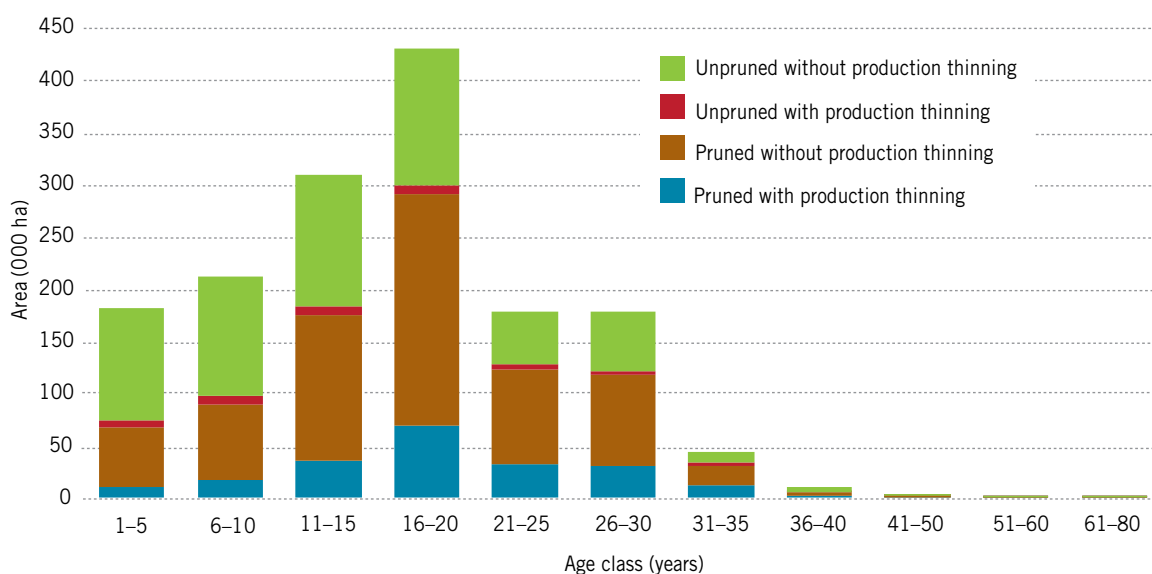


TABLE 9.16: AREA¹ OF RADIATA PINE PRUNED WITH PRODUCTION THINNING, BY TERRITORIAL AUTHORITY, AS AT 1 APRIL 2012

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Northland Wood Supply Region												
Far North District	400	387	1 016	2 173	2 037	4 789	3 095	555	8	0	0	14 460
Whangarei District	3	157	624	1 515	399	222	107	138	108	0	1	3 274
Kaipara District	0	25	603	2 131	1 103	433	80	15	4	4	0	4 398
Auckland Council	56	161	1 068	2 261	164	336	339	154	36	1	0	4 576
Region total	459	730	3 311	8 080	3 703	5 780	3 621	862	156	5	1	26 708
Central North Island Wood Supply Region												
Thames-Coromandel District	C	C	82	398	34	123	49	44	0	0	0	802
Hauraki District	0	3	79	261	26	37	49	5	0	0	0	460
Waikato District	37	540	1 792	881	168	34	85	16	0	29	19	3 601
Matamata-Piako District	0	13	54	95	26	18	9	1	0	0	0	216
Hamilton City	0	0	0	0	0	1	0	0	0	0	0	1
Waipa District	59	139	263	512	41	63	89	12	3	0	0	1 181
Otorohanga District	0	49	162	390	88	25	22	1	0	0	0	737
South Waikato District	0	8	27	141	31	59	14	3	0	0	0	283
Waitomo District	C	C	893	1 430	199	171	37	0	0	0	0	2 870
Taupo District	4 305	5 884	4 678	2 438	9 946	14 228	3 955	4	17	0	0	45 455
Tauranga District	0	1	2	6	0	5	0	0	0	0	0	14
Ruapehu District	175	291	1 475	2 972	208	684	421	1	0	0	0	6 227
Western Bay of Plenty District	28	190	355	1 777	872	438	127	0	0	0	1	3 788
Rotorua District	1 562	2 478	1 219	2 602	1 537	376	201	5	1	2	12	9 995
Kawerau District	0	0	0	0	0	0	0	0	0	0	0	0
Whakatane District	1 352	1 853	6 383	5 192	5 176	1 584	477	1	6	0	0	22 024
Opotiki District	0	1	8	34	0	0	11	0	0	0	0	54
Region total	7 650	11 530	17 472	19 129	18 352	17 846	5 546	93	27	31	32	97 708
East Coast Wood Supply Region												
Gisborne District	27	181	606	2 433	659	204	174	28	0	0	0	4 312
Region total	27	181	606	2 433	659	204	174	28	0	0	0	4 312
Hawke's Bay Wood Supply Region												
Wairoa District	64	23	116	766	43	230	C	C	2	0	0	1 276
Hastings District	117	107	382	3 473	426	472	C	C	3	0	1	5 218
Napier City	0	0	0	6	0	2	0	0	0	0	0	8
Central Hawke's Bay District	72	134	936	2 146	303	255	260	83	7	0	0	4 196
Region total	253	264	1 434	6 391	772	959	479	133	12	0	1	10 698
Southern North Island Wood Supply Region												
New Plymouth District	C	120	148	C	279	149	78	8	1	0	0	1 243
Stratford District	0	67	98	621	133	13	20	4	0	0	1	957
South Taranaki District	C	227	1 571	C	436	145	139	32	4	0	3	3 427
Wanganui District	86	794	1 649	3 863	1 024	847	53	31	29	0	0	8 376
Rangitikei District	230	386	468	2 687	486	481	162	52	4	0	0	4 956
Manawatu District	74	182	280	1 320	210	312	169	42	8	0	0	2 597
Palmerston North City	2	102	98	276	32	C	C	15	0	0	0	590
Horowhenua District	0	71	160	1 159	454	C	C	26	12	2	1	2 299
Tararua District	74	75	228	1 229	282	201	134	18	7	0	0	2 248
Kapiti Coast District	0	61	427	460	54	77	24	5	0	0	0	1 108
Upper Hutt City	0	6	96	89	49	30	C	4	C	0	24	326
Porirua City	0	0	C	90	C	164	7	0	0	0	0	293
Wellington City	C	0	C	0	C	2	2	0	0	0	0	172
Lower Hutt City	0	0	12	34	0	3	15	14	0	0	0	78
Masterton District	0	100	246	889	186	26	41	21	1	4	0	1 514
Carterton District	0	29	6	77	15	1	10	1	4	0	0	143
South Wairarapa District	23	74	136	122	37	21	C	0	C	0	0	445
Region total	604	2 294	5 660	14 199	3 772	2 794	1 053	273	88	6	29	30 772
North Island total	8 993	14 999	28 483	50 232	27 258	27 583	10 873	1 389	283	42	63	170 198

TABLE 9.16: CONTINUED...

TERRITORIAL AUTHORITY	AGE CLASS (YEARS)											
	1-5 YEARS (HA)	6-10 YEARS (HA)	11-15 YEARS (HA)	16-20 YEARS (HA)	21-25 YEARS (HA)	26-30 YEARS (HA)	31-35 YEARS (HA)	36-40 YEARS (HA)	41-50 YEARS (HA)	51-60 YEARS (HA)	61-80 YEARS (HA)	TOTAL (HA)
NELSON & MARLBOROUGH WOOD SUPPLY REGION												
Tasman District	46	167	C	C	351	289	85	181	24	0	1	3 508
Nelson City	0	0	C	C	0	0	0	0	0	0	0	95
Marlborough District	88	271	1 372	3 632	509	903	153	49	2	0	0	6 979
Kaikoura District	0	3	27	132	8	4	7	0	0	0	0	181
Region total	134	441	1 832	5 790	868	1 196	245	230	26	0	1	10 763
WEST COAST WOOD SUPPLY REGION												
Buller District	0	1	16	241	2	0	0	0	0	0	0	260
Grey District	0	0	7	173	11	44	73	18	0	0	0	326
Westland District	0	3	28	52	4	23	0	0	0	0	0	110
Region total	0	4	51	466	17	67	73	18	0	0	0	696
CANTERBURY WOOD SUPPLY REGION												
Hurunui District	C	C	472	1 671	305	348	129	59	C	3	0	3 309
Waimakariri District	14	89	227	1 177	414	151	27	13	26	0	0	2 138
Selwyn District	C	C	77	460	263	90	120	10	C	0	C	1 098
Christchurch City	0	176	449	825	C	C	135	90	0	0	0	1 981
Ashburton District	0	14	64	204	102	138	21	0	28	0	0	571
Mackenzie District	0	11	67	191	16	49	15	0	1	0	0	350
Timaru District	20	115	127	700	C	C	31	23	C	0	C	1 341
Waimate District	0	34	138	270	96	38	28	2	0	0	0	606
Region total	51	732	1 621	5 498	1 541	1 085	506	197	152	3	8	11 394
OTAGO & SOUTHLAND WOOD SUPPLY REGION												
Waitaki District	115	72	347	899	107	96	126	26	2	0	0	1 790
Queenstown-Lakes District	0	0	0	15	0	31	65	0	0	0	0	111
Central Otago District	0	C	C	91	31	110	15	4	1	0	38	363
Dunedin City	6	C	C	679	212	62	0	2	0	1	0	1 100
Clutha District	11	88	1 616	2 482	879	247	C	C	16	0	0	5 475
Southland District	175	234	997	1 390	556	295	C	C	51	0	0	4 025
Gore District	0	2	199	475	14	7	17	2	16	0	0	732
Invercargill City	0	3	0	63	0	0	1	0	0	0	0	67
Region total	307	477	3 292	6 094	1 799	848	496	225	86	1	38	13 663
South Island total	492	1 654	6 796	17 848	4 225	3 196	1 320	670	264	4	47	36 516
New Zealand total	9 485	16 653	35 279	68 080	31 483	30 779	12 193	2 059	547	46	110	206 714

Note

1. Net stocked planted production forest area.

Symbol

C Confidential.

FIGURE 9.18: AREA OF RADIATA PINE PRUNED WITH PRODUCTION THINNING BY WOOD SUPPLY REGION

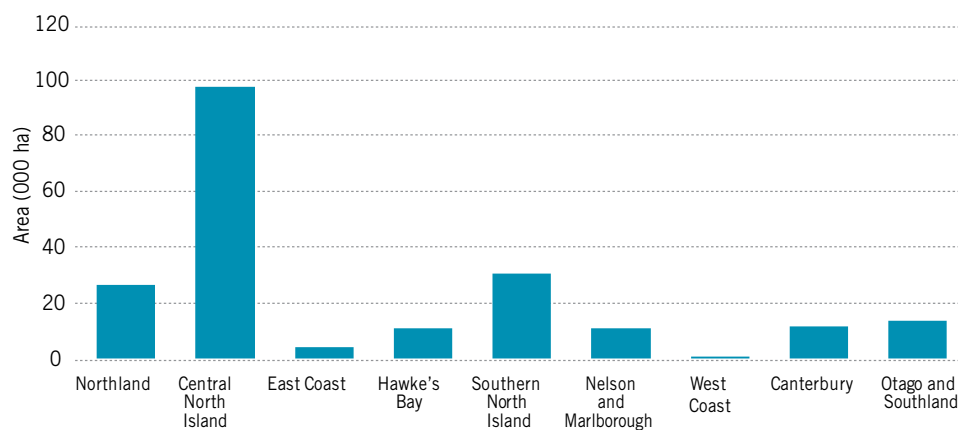


TABLE 9.17: AREA¹ OF RADIATA PINE PRUNED WITHOUT PRODUCTION THINNING BY TERRITORIAL AUTHORITY, AS AT 1 APRIL 2012

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Northland Wood Supply Region												
Far North District	2 248	3 252	4 565	11 548	5 583	5 312	1 295	238	27	0	0	34 068
Whangarei District	48	324	2 480	3 145	2 136	888	506	38	1	1	2	9 569
Kaipara District	583	760	2 765	3 501	1 668	1 277	275	48	18	5	0	10 900
Auckland Council	559	1 751	1 816	3 776	1 381	1 375	865	258	65	0	2	11 848
Region total	3 438	6 087	11 626	21 970	10 768	8 852	2 941	582	111	6	4	66 385
Central North Island Wood Supply Region												
Thames-Coromandel District	C	C	144	533	604	1 141	98	38	6	0	1	2 634
Hauraki District	16	20	531	1 056	476	14	0	0	0	0	0	2 113
Waikato District	340	895	1 709	2 589	658	143	17	37	0	0	1	6 389
Matamata-Piako District	0	7	48	288	11	35	48	2	0	0	0	439
Hamilton City	0	0	0	0	0	0	0	0	0	0	0	0
Waipa District	0	1	263	158	33	3	17	0	0	0	0	475
Otorohanga District	0	722	381	643	78	185	34	21	0	0	0	2 064
South Waikato District	217	396	734	1 620	5 738	3 594	122	2	11	0	0	12 434
Waitomo District	C	C	3 529	4 892	534	591	32	8	0	0	0	10 325
Taupo District	10 471	13 246	10 957	5 844	8 351	6 454	1 641	175	17	5	22	57 183
Tauranga District	0	9	24	34	16	0	0	0	0	0	0	83
Ruapehu District	1 297	1 246	2 686	3 238	2 269	1 236	816	5	0	0	0	12 793
Western Bay of Plenty District	950	259	1 947	4 024	2 761	1 137	102	11	2	0	0	11 193
Rotorua District	2 746	3 040	5 668	3 485	3 376	1 880	77	16	10	3	1	20 302
Kawerau District	0	0	0	0	0	0	0	0	0	0	0	0
Whakatane District	1 693	2 150	12 175	10 255	5 981	6 597	1 793	158	74	5	0	40 881
Opotiki District	277	280	730	376	2 150	2 635	769	29	0	0	0	7 246
Region total	18 025	23 061	41 526	39 035	33 036	25 645	5 566	502	120	13	25	186 554
East Coast Wood Supply Region												
Gisborne District	8 738	7 059	21 306	39 893	12 834	13 315	2 688	212	15	21	2	106 083
Region total	8 738	7 059	21 306	39 893	12 834	13 315	2 688	212	15	21	2	106 083
Hawke's Bay Wood Supply Region												
Wairoa District	6 083	6 864	6 924	15 807	1 187	2 988	C	C	1	2	0	40 840
Hastings District	1 984	4 820	6 623	11 326	2 609	4 266	C	C	C	C	2	31 943
Napier City	0	0	0	54	13	37	5	5	0	0	0	114
Central Hawke's Bay District	403	849	2 507	2 230	563	248	49	16	C	C	1	6 874
Region total	8 470	12 533	16 054	29 417	4 372	7 539	1 168	194	16	5	3	79 771
Southern North Island Wood Supply Region												
New Plymouth District	51	30	557	545	74	159	7	4	0	0	0	1 427
Stratford District	0	95	159	2 104	285	442	49	2	0	0	0	3 136
South Taranaki District	10	183	655	2 201	744	232	48	0	0	0	0	4 073
Wanganui District	1 795	1 301	1 215	6 401	2 075	1 206	58	20	4	0	0	14 075
Rangitikei District	265	307	3 236	3 503	760	223	127	28	2	0	0	8 451
Manawatu District	3	157	255	1 021	112	80	276	37	1	2	0	1 944
Palmerston North City	303	1	7	279	31	37	129	20	1	0	0	808
Horowhenua District	52	159	90	640	83	43	15	16	2	0	0	1 100
Taranua District	466	552	690	1 083	202	121	73	104	23	3	0	3 317
Kapiti Coast District	63	109	245	764	280	511	74	36	0	2	0	2 084
Upper Hutt City	641	720	731	518	489	772	C	C	19	C	0	4 411
Porirua City	2	30	C	212	C	92	4	60	3	0	0	724
Wellington City	0	8	C	268	C	17	0	0	0	0	0	308
Lower Hutt City	0	0	10	26	0	0	41	0	0	0	0	77
Masterton District	2 040	2 506	4 277	9 568	1 826	3 517	963	85	14	6	0	24 802
Carterton District	866	405	2 605	1 393	1 016	531	487	26	0	0	4	7 333
South Wairarapa District	296	441	1 499	2 175	612	279	C	C	3	C	0	5 332
Region total	6 853	7 004	16 287	32 701	8 869	8 262	2 732	589	72	29	4	83 402
North Island total	45 524	55 744	106 799	163 016	69 879	63 613	15 095	2 079	334	74	38	522 195

TABLE 9.17: CONTINUED...

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Nelson & Marlborough Wood Supply Region												
Tasman District	492	725	4 727	7 544	3 349	2 877	233	32	16	0	0	19 995
Nelson City	115	15	161	476	262	400	C	C	0	0	0	1 510
Marlborough District	1 245	2 282	5 468	12 553	4 546	6 735	1 054	253	72	0	0	34 208
Kaikoura District	32	67	133	556	7	87	C	C	0	0	0	941
Region total	1 884	3 089	10 489	21 129	8 164	10 099	1 417	295	88	0	0	56 654
West Coast Wood Supply Region												
Buller District	263	12	67	923	262	315	26	0	0	0	0	1 868
Grey District	12	1 152	1 532	1 632	329	1 750	156	14	53	0	0	6 630
Westland District	696	299	814	1 454	103	141	71	48	18	0	0	3 644
Region total	971	1 463	2 413	4 009	694	2 206	253	62	71	0	0	12 142
Canterbury Wood Supply Region												
Hurunui District	515	461	1 471	1 848	340	565	193	123	19	0	1	5 536
Waimakariri District	151	310	411	468	187	60	6	0	3	0	0	1 596
Selwyn District	C	C	493	900	2 401	1 265	6	142	1	0	0	5 928
Christchurch City	344	459	663	2 245	323	469	155	63	10	0	1	4 732
Ashburton District	C	C	221	258	69	181	3	47	0	0	1	865
Mackenzie District	13	64	167	829	94	31	37	4	41	0	0	1 280
Timaru District	298	224	350	1 037	855	550	41	1	0	0	0	3 356
Waimate District	768	334	1 271	1 533	421	215	42	0	0	0	0	4 584
Region total	2 646	2 100	5 047	9 118	4 690	3 336	483	380	74	0	3	27 877
Otago & Southland Wood Supply Region												
Waitaki District	282	1 713	2 027	2 630	873	732	81	58	35	12	5	8 448
Queenstown-Lakes District	0	0	0	6	11	0	2	0	3	0	1	23
Central Otago District	5	42	111	545	45	130	73	60	2	0	1	1 014
Dunedin City	1 163	665	987	2 154	1 579	2 015	83	18	21	0	0	8 685
Clutha District	3 633	5 592	8 106	12 716	3 214	4 027	576	123	39	5	2	38 033
Southland District	1 310	1 467	3 548	6 225	1 561	1 203	396	38	12	0	0	15 760
Gore District	0	1	131	237	18	62	35	0	1	0	0	485
Invercargill City	0	57	55	86	83	53	84	57	3	5	0	483
Region total	6 393	9 537	14 965	24 599	7 384	8 222	1 330	354	116	22	9	72 931
South Island total	11 894	16 189	32 914	58 855	20 932	23 863	3 483	1 091	349	22	12	169 604
New Zealand total	57 418	71 933	139 713	221 871	90 811	87 476	18 578	3 170	683	96	50	691 799

Note

1. Net stocked planted production forest area.

Symbol

C Confidential.

FIGURE 9.19: AREA OF RADIATA PINE PRUNED WITHOUT PRODUCTION THINNING BY WOOD SUPPLY REGION

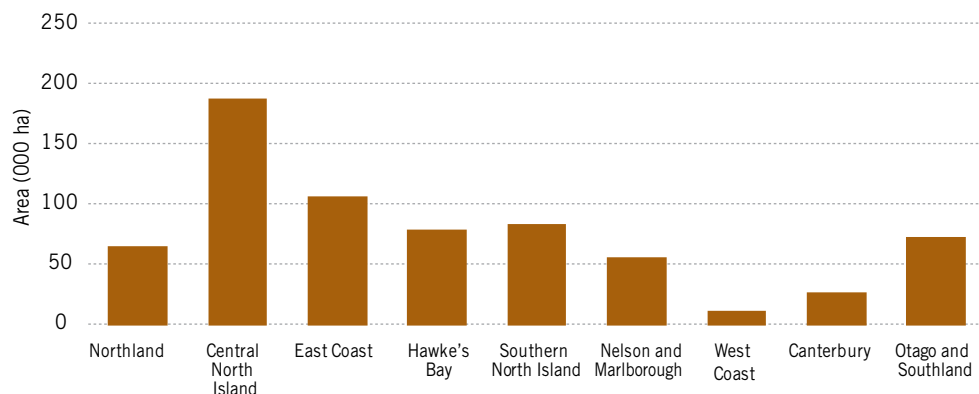


TABLE 9.18: AREA¹ OF RADIATA PINE UNPRUNED WITH PRODUCTION THINNING BY TERRITORIAL AUTHORITY, AS AT 1 APRIL 2012

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Northland Wood Supply Region												
Far North District	1 719	2 018	868	147	16	57	169	46	0	0	0	5 040
Whangarei District	0	0	0	1	0	0	0	3	0	0	0	4
Kaipara District	0	2	13	181	238	29	0	0	0	0	0	463
Auckland Council	0	29	161	1 103	789	34	0	0	0	0	0	2 116
Region total	1 719	2 049	1 042	1 432	1 043	120	169	49	0	0	0	7 623
Central North Island Wood Supply Region												
Thames-Coromandel District	17	40	36	135	15	54	95	15	0	0	0	407
Hauraki District	0	0	0	0	0	0	0	0	0	0	0	0
Waikato District	0	0	1	13	0	0	0	0	0	4	0	18
Matamata-Piako District	0	0	0	0	0	0	0	0	0	0	0	0
Hamilton City	0	0	0	0	0	0	0	0	0	0	0	0
Waipa District	0	3	42	29	0	0	0	0	0	0	0	74
Otorohanga District	0	15	12	53	2	0	19	0	0	0	0	101
South Waikato District	0	3	6	24	0	0	0	0	0	0	0	33
Waitomo District	0	37	265	448	32	0	7	0	0	0	0	789
Taupo District	2 277	818	677	387	902	1 088	1 123	0	1	0	0	7 273
Tauranga District	0	0	0	0	0	0	0	0	0	0	0	0
Ruapehu District	162	105	812	634	1 185	66	38	13	0	0	0	3 015
Western Bay of Plenty District	234	217	222	148	10	69	2	0	0	0	0	902
Rotorua District	141	593	1 359	116	43	1	0	0	0	0	1	2 254
Kawerau District	0	0	0	0	0	0	0	0	0	0	0	0
Whakatane District	467	1 006	1 022	350	374	2	23	0	0	0	0	3 244
Opotiki District	80	5	17	4	0	135	0	0	0	0	0	241
Region total	3 378	2 842	4 471	2 341	2 563	1 415	1 307	28	1	4	1	18 351
East Coast Wood Supply Region												
Gisborne District	0	39	9	270	140	239	24	25	0	0	0	746
Region total	0	39	9	270	140	239	24	25	0	0	0	746
Hawke's Bay Wood Supply Region												
Wairoa District	0	5	57	412	0	38	33	0	0	0	0	545
Hastings District	35	4	29	559	3	13	0	4	3	0	0	650
Napier City	0	0	0	0	0	0	0	0	0	0	0	0
Central Hawke's Bay District	13	0	23	8	8	15	0	4	0	0	0	71
Region total	48	9	109	979	11	66	33	8	3	0	0	1 266
Southern North Island Wood Supply Region												
New Plymouth District	C	3	5	C	0	0	0	0	0	0	0	85
Stratford District	0	0	0	0	0	0	0	0	0	0	0	0
South Taranaki District	0	0	0	12	0	3	0	2	0	0	0	17
Wanganui District	C	156	0	C	10	79	0	0	0	0	0	534
Rangitikei District	333	756	670	99	18	0	6	3	1	2	0	1 888
Manawatu District	0	1	1	10	0	25	0	0	0	0	0	37
Palmerston North City	0	0	1	41	0	0	0	0	0	0	0	42
Horowhenua District	253	336	332	288	39	4	1	0	2	35	2	1 292
Taranua District	0	13	46	177	7	30	5	6	0	0	0	284
Kapiti Coast District	0	0	0	10	0	0	0	0	0	0	0	10
Upper Hutt City	0	0	0	0	0	0	0	0	0	0	0	0
Porirua City	0	0	0	0	0	0	0	0	0	0	0	0
Wellington City	0	0	28	0	0	8	0	0	0	0	0	36
Lower Hutt City	0	0	0	0	0	46	36	0	0	0	0	82
Masterton District	98	44	36	50	21	19	4	0	0	0	0	272
Carterton District	0	0	1	7	0	3	0	0	0	0	0	11
South Wairarapa District	0	88	119	51	10	6	3	2	0	0	0	279
Region total	779	1 397	1 239	1 016	105	223	55	13	3	37	2	4 869
North Island total	5 924	6 336	6 870	6 038	3 862	2 063	1 588	123	7	41	3	32 855

TABLE 9.18: CONTINUED...

Territorial Authority	Age Class (Years)											Total (ha)
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	
Nelson & Marlborough Wood Supply Region												
Tasman District	47	163	C	C	70	109	111	21	23	0	0	1 283
Nelson City	0	0	C	C	0	0	0	0	0	0	0	12
Marlborough District	57	19	125	332	151	50	111	95	3	0	0	943
Kaikoura District	0	0	0	6	0	0	0	0	0	0	0	6
Region total	104	182	279	935	221	159	222	116	26	0	0	2 244
West Coast Wood Supply Region												
Buller District	0	0	0	0	0	0	0	0	0	0	0	0
Grey District	0	33	4	1	0	0	0	0	0	0	0	38
Westland District	0	0	0	0	0	0	0	4	0	0	0	4
Region total	0	33	4	1	0	0	0	4	0	0	0	42
Canterbury Wood Supply Region												
Hurunui District	C	C	128	602	121	68	56	C	C	0	0	1 494
Waimakariri District	0	9	13	142	36	14	2	C	C	3	2	232
Selwyn District	0	33	218	267	12	6	19	4	0	0	1	560
Christchurch City	0	2	59	67	C	C	0	0	1	0	0	139
Ashburton District	C	C	8	44	50	10	7	30	0	0	0	157
Mackenzie District	111	12	22	33	13	16	18	16	26	0	0	267
Timaru District	0	1	1	33	C	C	4	0	0	0	0	122
Waimate District	0	0	19	53	13	2	2	1	1	0	0	91
Region total	537	124	468	1 241	309	145	108	60	64	3	3	3 062
Otago & Southland Wood Supply Region												
Waitaki District	0	1	16	84	15	25	20	0	0	0	0	161
Queenstown-Lakes District	0	0	1	0	0	0	0	0	0	0	0	1
Central Otago District	0	0	0	3	0	0	0	0	0	0	0	3
Dunedin City	0	0	0	5	0	0	0	0	0	0	0	5
Clutha District	4	1 004	560	98	32	7	C	C	0	0	0	1 713
Southland District	137	292	137	125	100	10	C	C	51	0	0	887
Gore District	0	0	6	38	0	0	0	0	0	0	0	44
Invercargill City	0	0	5	6	0	0	0	0	0	0	0	11
Region total	141	1 297	725	359	147	42	48	15	51	0	0	2 825
South Island total	782	1 636	1 476	2 536	677	346	378	195	141	3	3	8 173
New Zealand total	6 706	7 972	8 346	8 574	4 539	2 409	1 966	318	148	44	6	41 028

Note

1. Net stocked planted production forest area.

Symbol

C Confidential.

FIGURE 9.20: AREA OF RADIATA PINE UNPRUNED WITH PRODUCTION THINNING BY WOOD SUPPLY REGION

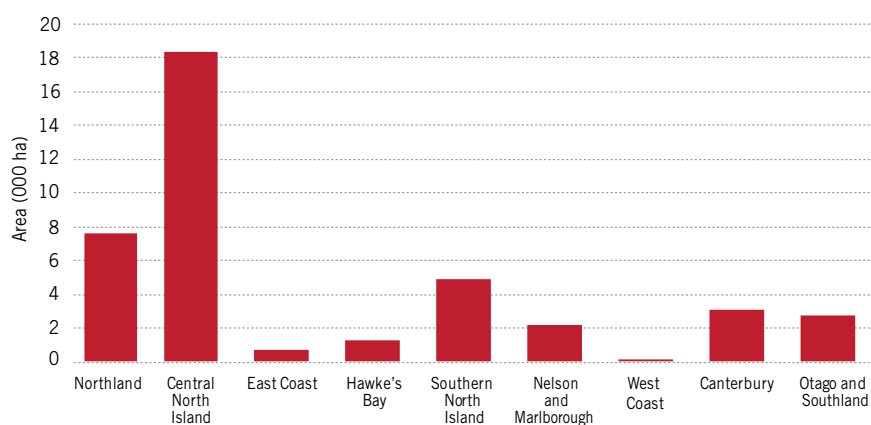


TABLE 9.19: AREA¹ OF RADIATA PINE UNPRUNED WITHOUT PRODUCTION THINNING BY TERRITORIAL AUTHORITY, AS AT 1 APRIL 2012

Territorial Authority	Age Class (Years)											
	1-5 Years (ha)	6-10 Years (ha)	11-15 Years (ha)	16-20 Years (ha)	21-25 Years (ha)	26-3 Years (ha)	31-35 Years (ha)	36-40 Years (ha)	41-50 Years (ha)	51-60 Years (ha)	61-80 Years (ha)	Total (ha)
Northland Wood Supply Region												
Far North District	9 250	5 379	3 955	4 545	2 882	8 262	577	658	72	2	0	35 582
Whangarei District	3 391	2 859	2 188	2 055	944	6 183	322	58	22	1	0	18 023
Kaipara District	2 537	1 938	2 821	4 085	4 768	5 138	72	41	64	2	4	21 470
Auckland Council	3 970	5 510	5 671	4 591	681	491	141	99	8	3	9	21 174
Region total	19 148	15 686	14 635	15 276	9 275	20 074	1 112	856	166	8	13	96 249
Central North Island Wood Supply Region												
Thames-Coromandel District	3 642	2 755	1 930	1 985	889	587	153	49	39	11	17	12 057
Hauraki District	102	161	131	141	27	47	5	1	0	0	0	615
Waikato District	1 701	662	1 675	2 538	988	132	148	22	16	37	23	7 942
Matamata-Piako District	298	205	27	44	30	21	58	2	0	0	0	685
Hamilton City	0	0	0	0	0	0	0	0	0	0	0	0
Waipa District	41	8	124	119	20	4	30	0	0	0	2	348
Otorohanga District	0	140	608	770	16	189	4	15	0	0	0	1 742
South Waikato District	6 867	11 186	13 524	12 009	7 340	659	67	10	17	0	94	51 773
Waitomo District	2 793	2 513	1 416	1 465	88	381	116	8	0	0	0	8 780
Taupo District	6 236	10 256	13 210	10 509	5 022	3 119	310	29	33	25	4	48 753
Tauranga District	0	0	0	0	0	0	0	0	0	0	0	0
Ruapehu District	2 357	1 725	6 828	6 812	1 453	3 406	752	164	1	0	0	23 498
Western Bay of Plenty District	749	2 095	1 536	818	1 455	77	58	2	4	0	7	6 801
Rotorua District	3 103	3 585	2 697	2 276	2 341	216	30	8	31	0	8	14 295
Kawerau District	0	0	0	0	0	0	0	0	0	0	0	0
Whakatane District	10 459	8 172	4 563	5 371	687	137	132	41	4	31	1	29 598
Opotiki District	1 032	708	672	616	1 194	4 372	439	10	0	0	0	9 043
Region total	39 380	44 171	48 941	45 473	21 550	13 347	2 302	361	145	104	156	215 930
East Coast Wood Supply Region												
Gisborne District	5 479	5 836	9 347	7 197	3 272	4 522	1 689	678	108	3	6	38 137
Region total	5 479	5 836	9 347	7 197	3 272	4 522	1 689	678	108	3	6	38 137
Hawke's Bay Wood Supply Region												
Wairoa District	1 755	2 004	1 045	2 513	24	2 582	161	5	11	3	0	10 103
Hastings District	5 179	5 324	4 873	4 539	338	505	200	80	C	C	0	21 090
Napier City	0	0	0	1	0	6	0	0	0	0	0	7
Central Hawke's Bay District	296	189	1 846	965	211	267	53	38	C	C	14	3 918
Region total	7 230	7 517	7 764	8 018	573	3 360	414	123	70	35	14	35 118
Southern North Island Wood Supply Region												
New Plymouth District	0	68	145	271	41	26	20	30	0	0	0	601
Stratford District	246	409	172	514	52	359	10	0	0	0	0	1 762
South Taranaki District	C	250	347	C	297	222	85	17	25	3	1	2 255
Wanganui District	C	834	1 296	C	41	25	98	6	6	0	9	4 776
Rangitikei District	55	276	2 634	1 771	122	100	93	101	157	33	0	5 342
Manawatu District	130	222	398	743	72	124	80	20	6	0	4	1 799
Palmerston North City	301	40	35	69	32	C	C	102	0	0	0	755
Horowhenua District	274	459	197	564	47	C	C	33	0	0	2	1 717
Taranua District	1 074	560	2 469	4 163	242	507	242	69	18	11	2	9 357
Kapiti Coast District	0	88	131	13	33	0	65	58	1	0	0	389
Upper Hutt City	35	91	212	289	267	184	52	22	C	C	0	1 318
Porirua City	0	0	0	138	196	50	0	0	0	0	0	384
Wellington City	0	0	16	23	19	0	0	0	0	0	0	58
Lower Hutt City	0	0	0	28	0	7	17	6	0	0	0	58
Masterton District	234	743	995	1 948	405	718	212	194	190	9	8	5 656
Carterton District	173	339	938	753	160	140	52	89	70	3	1	2 718
South Wairarapa District	47	391	491	551	234	178	112	99	C	C	1	2 166
Region total	3 348	4 770	10 476	14 528	2 260	2 741	1 354	846	686	74	28	41 111
North Island total	74 585	77 980	91 163	90 492	36 930	44 044	6 871	2 864	1 175	224	217	426 545

TABLE 9.19: CONTINUED...

TERRITORIAL AUTHORITY	AGE CLASS (YEARS)											
	1-5 YEARS (HA)	6-10 YEARS (HA)	11-15 YEARS (HA)	16-20 YEARS (HA)	21-25 YEARS (HA)	26-30 YEARS (HA)	31-35 YEARS (HA)	36-40 YEARS (HA)	41-50 YEARS (HA)	51-60 YEARS (HA)	61-80 YEARS (HA)	TOTAL (HA)
NELSON & MARLBOROUGH WOOD SUPPLY REGION												
Tasman District	13 685	14 165	7 628	9 169	4 362	2 458	576	115	175	12	13	52 358
Nelson City	2 122	1 426	1 286	1 218	437	237	C	C	1	0	0	6 763
Marlborough District	6 523	4 997	3 730	7 508	888	1 647	711	174	118	27	2	26 325
Kaikoura District	0	10	30	40	3	19	C	C	1	2	0	112
Region total	22 330	20 598	12 674	17 935	5 690	4 361	1 318	301	295	41	15	85 558
WEST COAST WOOD SUPPLY REGION												
Buller District	355	169	84	146	35	74	26	3	4	0	0	896
Grey District	1 611	1 764	417	312	67	334	448	86	88	0	0	5 127
Westland District	745	933	1 231	537	47	257	202	209	15	1	0	4 177
Region total	2 711	2 866	1 732	995	149	665	676	298	107	1	0	10 200
CANTERBURY WOOD SUPPLY REGION												
Hurunui District	2 072	4 238	6 066	4 849	2 491	1 651	155	5	3	8	6	21 544
Waimakariri District	437	865	2 134	2 579	1 155	478	63	15	18	36	0	7 780
Selwyn District	450	382	594	1 340	289	278	189	246	C	C	C	3 794
Christchurch City	200	124	411	563	220	170	164	51	5	1	22	1 931
Ashburton District	338	252	271	238	46	93	83	11	8	C	C	1 360
Mackenzie District	39	21	60	247	21	14	5	40	14	2	0	463
Timaru District	85	63	212	890	256	69	11	0	C	0	C	1 597
Waimate District	19	197	353	577	179	604	253	20	25	24	5	2 256
Region total	3 640	6 142	10 101	11 283	4 657	3 357	923	388	108	79	47	40 725
OTAGO & SOUTHLAND WOOD SUPPLY REGION												
Waitaki District	275	564	583	886	204	341	57	29	18	12	2	2 971
Queenstown-Lakes District	0	10	13	25	11	6	13	0	1	20	6	105
Central Otago District	0	C	C	331	20	40	34	4	8	4	31	678
Dunedin City	1 083	C	C	438	164	514	172	0	9	13	1	2 552
Clutha District	1 586	2 627	3 279	2 696	1 121	827	299	66	6	10	2	12 519
Southland District	1 929	3 916	4 866	4 877	1 953	2 367	274	179	95	16	0	20 472
Gore District	6	34	321	451	34	21	29	6	20	1	0	923
Invercargill City	0	4	9	41	14	23	16	0	4	0	0	111
Region total	4 879	7 312	9 278	9 745	3 521	4 139	894	284	161	76	42	40 331
South Island total	33 560	36 918	33 785	39 958	14 017	12 522	3 811	1 271	671	197	104	176 814
New Zealand total	108 145	114 898	124 948	130 450	50 947	56 566	10 682	4 135	1 846	421	321	603 359

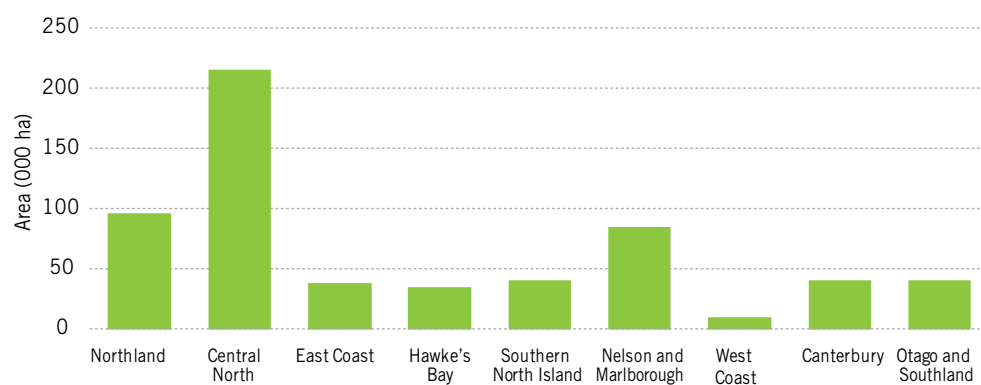
Note

1. Net stocked planted production forest area.

Symbol

C Confidential.

FIGURE 9.21: AREA OF RADIATA PINE UNPRUNED WITHOUT PRODUCTION THINNING BY WOOD SUPPLY REGION



APPENDIX 1: GLOSSARY

Age: The ages of forest areas are as at 1 April of the survey year. A forest area is age one as at 1 April 2012 if it was planted in the preceding 12-month period, that is, between 1 April 2011 and 31 March 2012.

Confidentiality: Figures are considered confidential if the figure is made up of fewer than three owners' information or where one owner's data makes up more than 80 percent of the number. Forest owners are asked whether they are prepared to waive these strict confidentiality criteria in relation to the data they supply. If a number does not meet the confidentiality criteria and one of the contributors to the confidential number is not prepared to waive the confidentiality rules then that number is not published.

Clear fell: To harvest all merchantable trees within a specified physical area of land.

Crop type: For the purpose of the NEFD, a crop type is defined as an aggregate of forest stands of the same species group and tending regime located within the same territorial authority area. The crop type definitions are mutually exclusive.

Land cover types prior to afforestation:

- "Improved pasture" is land that contains improved pasture species and/or has been fertilised.
- "Unimproved pasture" is land with no improved pasture species that has not been fertilised.
- "Other woody land" is land predominantly covered in species such as bracken, gorse, manuka, kanuka or other woody plant species.

Net stocked forest area: The planted production forest area occupied by trees excluding mappable gaps such as landings, roads and other unstocked areas.

New planting: The planting of trees for the primary purpose of producing wood or wood fibre, on land that has not previously been used for growing planted production forests.

Planted production forest: An area of trees not less than one hectare in size, planted and managed with the

intention of producing wood or wood fibre. In New Zealand almost all planted production forests are made up of introduced tree species.

The NEFD survey does not aim to collect information on individual forests. Instead, it collects the forest area by crop type of all forests administered by each forest owner or manager.

Replanting: The replanting of a planted production forest area that has been clear felled.

Rotation number:

- The first rotation is stands of forest planted on land not previously in planted forest.
- The second and subsequent rotations are stands of forest growing on land from which a previous forest crop has been grown and harvested.

Species group: Six groupings of tree species are used to describe the national planted production forest resource:

- Radiata pine (*Pinus radiata*);
- Douglas-fir (*Pseudotsuga menziesii*);
- cypress species;
- other softwoods;
- eucalypt species;
- other hardwoods.

Where a mixture of species is present the area is allocated to the crop type of the dominant species group.

Stand: A defined area of standing trees or forest, usually of one species, age and tending regime.

Standing volume: The total volume (in cubic metres) of wood contained in all live crop stems of all age classes. The standing volume includes some non-recoverable volume such as stumps and the non-merchantable tops of stems, but excludes bark.

Tending regime: The tending regime is based on the current management, or prior to application of tending, the intention to carry out pruning or production thinning.

Radiata pine has four tending regime categories, Douglas-fir has two, and other softwoods and hardwoods are not assigned a tending regime.

The radiata pine tending regime categories are:

- pruned with production thinning;
- pruned without production thinning;
- unpruned with production thinning;
- unpruned without production thinning.

The Douglas-fir tending regime categories are:

- with production thinning;
- without production thinning.

“Pruned” refers to pruning carried out before age 12 so that more than 50 percent of the stems in the planned final crop stocking will contain a pruned butt log of not less than four metres in length.

“Production thinning” refers to the extraction of thinnings for commercial use. Stands that have been production thinned produce a smaller clear fell volume than stands that have not been production thinned.

Territorial authority: District and city council areas adopted in October 1989 (see Table 7.1 and Figures 7.1 and 7.2).

TRVIB: Total recoverable volume inside bark. This is the volume of wood recovered during harvesting, excluding bark, expressed in cubic metres.

Wood supply region: Zones in New Zealand where forest stands of the same species and tending regime are represented by the same generalised yield table. These regions reflect wood supply processing catchments, and reconcile with aggregates of territorial authorities.

Yield table: A tabular representation of forest yield in cubic metres per hectare. The yield table is expressed in terms of total standing volume, total recoverable volume and three log type volumes, together with any production thinning volumes by age (one to 80 years). There is a separate yield table for each crop type.

APPENDIX 2: 2012 NEFD QUESTIONNAIRE

SECTION A: FOREST OWNERSHIP

- The information from this section does not go into any publication, but is used only to keep track of forest ownership changes for this and future NEFD surveys.
- If you need to provide details for more than one owner, please attach a sheet of paper with the required details on it for each transaction.

A1 Which best describes the ownership of the majority of your forest? (Tick one category only)

- | | |
|---|--|
| <input type="checkbox"/> privately owned | <input type="checkbox"/> registered public company |
| <input type="checkbox"/> local government | <input type="checkbox"/> central government |
| <input type="checkbox"/> state owned enterprise | <input type="checkbox"/> other (please specify)..... |

Forest and forest land sold

A2 During the period 1 April 2011 to 31 March 2012 did your enterprise sell any forest or forest land to another party?

Include: Land awaiting replanting or harvested land awaiting a land use decision by the new owner.

- | | | |
|------------------------------|---|-----------------|
| <input type="checkbox"/> YES | ▶ | Go to A3 |
| <input type="checkbox"/> NO | ▶ | Go to A5 |

A3 What did your enterprise sell? (Tick one category only)

- | | | |
|--------------------------------------|------------------------------------|---|
| <input type="checkbox"/> Forest only | <input type="checkbox"/> Land only | <input type="checkbox"/> Both forest and land |
|--------------------------------------|------------------------------------|---|

A4 Please give details of area sold:

Name of new owner

New owner's address

Name of forest/land

Territorial authority where forest/land is located

Area of forest or land (hectares)

_____ ha

SECTION A: continued FOREST OWNERSHIP

Forest or forest land acquired

A5 During the period 1 April 2011 to 31 March 2012 did your enterprise acquire new forest or forest land?

Include: Land that is intended for growing plantation forest.

☐ YES ► Go to **A6**

☐ NO ► Go to **A7**

A6 Please give details of area acquired:

Name of previous owner

Previous owner's address

Name of forest/land

Territorial authority where forest/land is located

Area of forest (hectares)

ha

Forest leases and joint ventures

A7 During the period 1 April 2011 to 31 March 2012, did your enterprise harvest forest from a lease or joint venture including forestry rights?

☐ YES ► Go to **A8**

☐ NO ► Go to **Section B**

A8 Will another party now be responsible for future use of the land (i.e. you have handed back the land)?

☐ YES ► Go to **A9**

☐ NO ► Go to **Section B**

A9 Please give details of the other party and the land they will now be responsible for:

Land owner's name

Land owner's address

Name of land

Territorial authority where land is located

Area of land (hectares)

ha

SECTION B: AREA BY AGE DATA AS AT 1 APRIL 2012

Supplying the data electronically

- The data requested in this section can be supplied electronically.
- Please see the supplement 'NOTES FOR RETURNING DATA ELECTRONICALLY' for more information.

Pre-printed pages

- If your enterprise provided us with your forest area by age in the previous survey. This data has been included in your current questionnaire on one or more pre-printed pages.

B1 Are there any pre-printed pages included with your survey?

☐ YES



Check the data printed on each page and update if necessary. If there has been no change, just tick the circle on each page.

☐ NO



Answer questions **B2** to **B8**

- Make a copy of questions **B2** to **B8** for each additional forest area that is not included in the pre-printed pages.

SECTION B: continued AREA BY AGE DATA AS AT 1 APRIL 2012

Instructions for questions B2 to B8

More than one copy of questions B2 to B8 may be required.

A copy of questions B2 to B8 is required for each additional forest area that has a different:

- Territorial authority where the forest is located.
- Rotation number (either first or second and subsequent rotations).
- Tending regime.
- Forest owner's name.
- Species.

More copies required?

For additional copies of B2 to B8 you can either:

- Make a photocopy of the pages provided containing questions B2 to B8.
- Contact survey support on 0800 778 901 or email NEFD@mpi.govt.nz.

B2 Territorial authority where forest is located:
See the attached supplement 'MAP OF WOOD SUPPLY REGION BOUNDARIES AND TERRITORIAL AUTHORITY BOUNDARIES' for guide

B3 Forest owner's name:

B4 Rotation number:

☐ First rotation (area planted in forest for the first time)

☐ Second or subsequent rotation (area replanted following harvesting of existing planted forest)

B5 Which species is this information for? (Tick one category only)

☐ Radiata pine ► Go to **B6**

☐ Douglas-fir ► Go to **B7**

☐ Cypress species
includes macrocarpa, lusitanica and all other cypress species

☐ Other softwoods
includes conifers e.g. pine (excluding radiata pine), fir (excluding douglas-fir), larch or redwood

☐ Eucalypt
includes all eucalypt species

☐ Other hardwoods
includes broad-leaved trees e.g. wattle, acacia (including Australian blackwood), walnut, oak, poplar, willow, paulownia, birch, alder or elm

→ Go to **B8**

SECTION B: continued AREA BY AGE DATA AS AT 1 APRIL 2012

Tending regime

- **Intended tending regime:** For example, for young stands that you intend to prune at a later date, please include as “pruned”.
- **Production thinning:** Where thinnings are sold, e.g. for posts or chipwood. Don't include thinning to waste.

B6 Radiata pine tending regime or intended tending regime (Tick one in each category)

Pruning

- ☐ Pruned
☐ Unpruned

Thinning

- ☐ Production thinned
☐ No production thinning

B7 Douglas-fir tending regime or intended tending regime (Tick one category only)

- ☐ Production thinned ☐ No production thinning

Area by age information

B8 As at 1 April 2012, give the net stocked area in hectares of trees of each age.

Hectares may be given to one decimal point.

Make sure you write the **Total Net Stocked Area** once this form is complete.

year planted	age in 2012	net stocked area (ha)	year planted	age in 2012	net stocked area (ha)	year planted	age in 2012	net stocked area (ha)	year planted	age in 2012	net stocked area (ha)		
2011	1		1990	22		1969	43		1948	64			
2010	2		1989	23		1968	44		1947	65			
2009	3		1988	24		1967	45		1946	66			
2008	4		1987	25		1966	46		1945	67			
2007	5		1986	26		1965	47		1944	68			
2006	6		1985	27		1964	48		1943	69			
2005	7		1984	28		1963	49		1942	70			
2004	8		1983	29		1962	50		1941	71			
2003	9		1982	30		1961	51		1940	72			
2002	10		1981	31		1960	52		1939	73			
2001	11		1980	32		1959	53		1938	74			
2000	12		1979	33		1958	54		1937	75			
1999	13		1978	34		1957	55		1936	76			
1998	14		1977	35		1956	56		1935	77			
1997	15		1976	36		1955	57		1934	78			
1996	16		1975	37		1954	58		1933	79			
1995	17		1974	38		1953	59		1932 or earlier	80+			
1994	18		1973	39		1952	60						
1993	19		1972	40		1951	61		TOTAL NET STOCKED AREA				
1992	20		1971	41		1950	62						
1991	21		1970	42		1949	63						

SECTION C: PLANTING AND HARVESTING

- Use a separate form for each Territorial Authority. To obtain more copies of this section call 0800 778 901 or email NEFD@mpi.govt.nz.

C1 Between 1 April 2011 and 31 March 2012, did your enterprise carry out any planting or harvesting?

☐ YES



Go to **C2**

☐ NO



Go to **C8**

Planting

C2 Territorial authority where forest is located:

See the attached supplement 'MAP OF WOOD SUPPLY REGION BOUNDARIES AND TERRITORIAL AUTHORITY BOUNDARIES' for guide

C3 Planting for the year ended 31 December 2011:

	New planted area for year ended Dec 2011	Area replanted for year ended Dec 2011
	Give the area planted on a site not already in use for growing planted production forest (i.e. first rotation)	Give the area of forest which was replanted following harvest
Radiata pine	<input type="text"/> ha	<input type="text"/> ha
Douglas-fir	<input type="text"/> ha	<input type="text"/> ha
Cypress species includes macrocarpa, lusitanica and all other cypress species	<input type="text"/> ha	<input type="text"/> ha
Other softwoods includes conifers e.g. pine (excluding radiata pine), fir (excluding douglas-fir), larch or redwood	<input type="text"/> ha	<input type="text"/> ha
Eucalypt species includes all eucalypt species	<input type="text"/> ha	<input type="text"/> ha
Other hardwoods includes broad-leaved trees e.g. wattle, acacia (including Australian blackwood), walnut, oak, poplar, willow, paulownia, birch, alder or elm	<input type="text"/> ha	<input type="text"/> ha
TOTAL	<input type="text"/> ha	<input type="text"/> ha

C4 Of the total new area planted above in **C3** how much was planted on land that was previously covered by:

Improved pasture land that has been fertilised and contains improved pasture species	<input type="text"/> ha
Unimproved pasture land not fertilised, with no improved pasture species sown	<input type="text"/> ha
Woody vegetation land predominantly covered in bracken gorse, manuka, kanuka, or other woody species	<input type="text"/> ha
Total	* <input type="text"/> ha

*Note: This total should be the same as the total new planted area in question **C3**

SECTION C: continued PLANTING AND HARVESTING

Harvesting

C5 Territorial authority where forest is located:

See the attached supplement 'MAP OF WOOD SUPPLY REGION BOUNDARIES AND TERRITORIAL AUTHORITY BOUNDARIES' for guide

C6 Harvesting for the year ended 31 March 2012:

	Area clear felled	Clear felled volume (recovered)	Average age clear felled (area-weighted)	Production thinning volume (recovered)
Note that 1 tonne = about 1m ³	include any salvage logging of windthrown or other damaged trees	The recovered volume of wood (inside bark) from harvesting or clear felling (see glossary for details)	The average age of harvested stands weighted by the area of each stand (see glossary for details)	The recovered volume of wood (inside bark) from thinning for commercial use (see glossary for details)
Radiata pine	<input type="text"/> ha	<input type="text"/> m ³	<input type="text"/> years	<input type="text"/> m ³
Douglas-fir	<input type="text"/> ha	<input type="text"/> m ³	<input type="text"/> years	<input type="text"/> m ³
Cypress species	<input type="text"/> ha	<input type="text"/> m ³	<input type="text"/> years	<input type="text"/> m ³
includes macrocarpa, lusitanica and all other cypress species				
Other softwoods	<input type="text"/> ha	<input type="text"/> m ³	<input type="text"/> years	<input type="text"/> m ³
includes conifers e.g. pine (excluding radiata pine), fir (excluding douglas-fir), larch or redwood				
Eucalypt species	<input type="text"/> ha	<input type="text"/> m ³	<input type="text"/> years	<input type="text"/> m ³
includes all eucalypt species				
Other hardwoods	<input type="text"/> ha	<input type="text"/> m ³	<input type="text"/> years	<input type="text"/> m ³
includes broad-leaved trees e.g. wattle, acacia (including Australian blackwood), walnut, oak, poplar, willow, paulownia, birch, alder or elm				
TOTAL	<input type="text"/> ha	<input type="text"/> m ³	<input type="text"/> years	<input type="text"/> m ³

C7 Using the radiata pine clear felled volume in **C6** above, please separate it into log grade sold:

Export logs should be included in the log grades, e.g. if a pruned log is exported as an unpruned grade, please record as "unpruned" (see glossary for definitions).

Volume (recovered) sold as	Pruned logs	Unpruned sawlogs	Pulp/chip logs	Total recovered
	<input type="text"/> m ³	+ <input type="text"/> m ³	+ <input type="text"/> m ³	= <input type="text"/> m ³

* Note: this total should be equal to the radiata pine clear felled volume in question **C6**

SECTION C: continued PLANTING AND HARVESTING

- If area equals zero then please write zero in the box provided.

C8 On 31 March 2012, what area of harvested land was awaiting replanting?

Include: Area clear felled and intended to be replanted but has not yet been replanted

Exclude: Land handed back to landowner as stated in **Section A**

 ha

C9 On 31 March 2012, what area of harvested land was awaiting a land use decision?

Include: Area that has been harvested for which a decision on whether to replant or convert has not yet been made

Exclude: Area given in question **C8** and land handed back to landowner as stated in **Section A**

 ha

C10 Between 1 April 2011 and 31 March 2012, has your enterprise converted any of its land to a non-forest land use?

Include: Land that is in the process of being converted to a non-forest land use

Exclude: Land handed back to landowners as stated in **Section A**

☐ YES



Go to **C11**

☐ NO



Go to **Section D**

C11 On 1 April 2011 and 31 March 2012, what area of harvested forest was converted to a non-forest land use?

Include: Mature forest on land that is in the process of being converted

Exclude: Immature forests or forests less than age 20

 ha

C12 Between 1 April 2011 and 31 March 2012, what area of immature forest was converted to a non-forest land use?

Include:

- Forests less than age 20 including those on land that is in the process of being converted
- Immature forests such as short rotation eucalypts

Exclude: Mature forests that you talked about in question **C11**

 ha

SECTION D: CONFIDENTIALITY AND FEEDBACK

Compulsory question

- D1** MPI applies standard confidentiality rules to the data collected in this survey to prevent publication of data where individual owner's data could be identified. However, this can diminish the value of the publication by providing incomplete information in some categories.

Information provided in Section B is combined and published at the territorial authority level. Information provided in Section C is combined and published at the national level. No information provided in Sections A or D is published.

- **If you tick yes**, then data that you have provided in Sections B and C will be published in combined form whether or not it meets MPI's standard confidentiality rules.
- **If you tick no**, and the combined results in any one category that your data contributes to do not meet the standard confidentiality rules, then the results will not be published.

I agree to the Ministry for Primary Industries publishing, in combined form, the forest data that I have supplied for the 2012 NEFD survey.

☐ YES

☐ NO

Remember that all details of forest owners are held in confidence and not published.

- D2** Approval to access forest ownership details in the event of an emergency or possible biosecurity breach.

I agree to the Ministry for Primary Industries and allied organisations using my name, contact details and total forest area (as reported in this questionnaire) for biosecurity and emergency events only.

☐ YES

☐ NO

Name

Signed

Position

Date

- D3** Please provide any comments that would help MPI interpret the information you have provided. MPI also appreciates any feedback you have on how to improve this questionnaire.

Name

Position (owner etc)

Telephone number(s)

Email

Date completed

FOREST AREA RECONCILIATION

- MPI uses the following reconciliation table to check that data supplied reconciles. We suggest you use this table to check your responses as this will minimise the amount of post-survey follow up work required.

2011 Information

This information can be found in your previous NEFD return

Net stocked area as at 1 April 2011		<input type="text"/>	ha
Area awaiting replanting on 31 March 2011	+	<input type="text"/>	ha
Area awaiting a land use decision on 31 March 2011	+	<input type="text"/>	ha
TOTAL forest area as at 1 April 2011	=	<input type="text"/>	ha

2012 Information

This information can be found in this questionnaire

Forest area acquired	+	<input type="text"/>	ha	A5
New planted area (first rotation)	+	<input type="text"/>	ha	C3
Forest area sold	-	<input type="text"/>	ha	A4
Forest area another party now responsible for (for example, area handed back)	-	<input type="text"/>	ha	A9
Clear felled area now converted to a non-forest land use	-	<input type="text"/>	ha	C11
Immature forest cleared for conversion to a non-forest land use	-	<input type="text"/>	ha	C12
Re-mapping adjustment	+ / -	<input type="text"/>	ha	Pls circle + or -
Net stocked area as at 1 April 2012	=	<input type="text"/>	ha	B8
Area awaiting replanting on 31 March 2012	+	<input type="text"/>	ha	C8
Area awaiting land use decision on 31 March 2012	+	<input type="text"/>	ha	C9
TOTAL forest area as at 1 April 2012	=	<input type="text"/>	ha	

This is the end of the questionnaire.

Returning the survey

Make sure you have answered **Section D**

Please return all the copies of all the forms you have used, as well as the forms sent to you as part of the questionnaire.

Please return the survey to:

NEFD Survey Support

email: NEFD@mpi.govt.nz

mail: Survey Support, NEFD, Ministry for Primary Industries, PO Box 585, Palmerston North 4440

tel: 0800 778 901

fax: (06) 351 7906

THANK YOU FOR YOUR TIME AND EFFORT

A copy of the complete results from last year's NEFD survey is available free of charge on the Ministry's website:

<http://www.mpi.govt.nz/news-resources/statistics-forecasting/statistical-publications/national-exotic-forest-description>

or by emailing: policy.publications@mpi.govt.nz

FOR ASSISTANCE PLEASE

> refer to the guide notes

> contact survey support on 0800 778 901

> email NEFD@mpi.govt.nz

APPENDIX 3: NEW PLANTING

IMPUTATION METHODOLOGY

Since 1992, MPI has conducted an annual forest nursery survey. This nursery survey measures the sales of planting stock from commercial forest nurseries. Details of how this survey is operated are described in *Predicting and Measuring New Planting from Nursery Surveys* (Eyre, 1995). An estimate of total national new planting is calculated from the reported numbers of seedlings sold, and estimates of replanting and new planting are then derived. The nursery survey provides the most complete indicator of the area of new forest established each year. The methodology was reviewed in 2003 (Manley *et al*, 2003).

For the calendar years 1992 to 2006 additional new planting areas not directly captured in the NEFD surveys were estimated (imputed) based on the nursery survey and added to the NEFD dataset. No additional new planting was added for the 2007 to 2010 calendar years because of the very low levels of new forest planting that took place in those years.

Table 3.1 compares the new planting figures collected in the NEFD postal surveys with the nursery survey estimates.

The national new planting adjustments were then distributed into territorial authorities using the proportions indicated from the new planting collected in the postal survey. See Table 9.7 (page 26–27).

Within each territorial authority imputed new planting was allocated to NEFD crop types using the postal survey results in the following way:

- The imputed new planting was allocated into species groups based on the relative proportions of each species group within the one to five year age class.
- For radiata pine, the imputed new planting was allocated into the four NEFD tending regimes, based on the relative proportion of each of these tending regimes across all the age classes. All the Douglas-fir imputed new planting was allocated to the “without production thinning” tending regime.

Historically, imputed new planting estimates are revised each year, based on any new information on the area of young forest captured directly in the NEFD survey.

ASSUMPTIONS

The inclusion of imputed new planting into the 2011 NEFD dataset makes the following assumptions.

- The new planting estimates from the nursery seedling surveys are the actual areas of new planting established between 1992 and 2006.
- The imputed new planting in each territorial authority occurs in the same proportion as the new planting captured in the NEFD surveys.
- Imputed new planting for radiata pine is assigned to the tending regimes in the same proportions as the radiata pine new planting captured in the NEFD surveys.

APPENDIX 4: THE NEFD

STEERING COMMITTEE

The NEFD Steering Committee has been constituted by the New Zealand Forest Owners Association and the Ministry for Primary Industries to oversee the preparation of each edition of the National Exotic Forest Description. Members of the Steering Committee during the preparation of this report were:

The Steering Committee's terms of reference are included in Appendix 5.

MEMBER	NOMINATED BY
Alan Bell Alan Bell & Associates	New Zealand Forest Owners Association
Philip Elworthy Rayonier New Zealand Ltd	New Zealand Forest Owners Association
Stuart Anderson Ministry for Primary Industries	Ministry for Primary Industries
John Moore SCION	Ministry for Primary Industries
Ian Hinton (Chairman) Timberlands Ltd	New Zealand Forest Owners Association
Ross Jones Hancock Forest Management	New Zealand Forest Owners Association
Paul Lane Ministry for Primary Industries	Ministry for Primary Industries
Hamish Levack Farm Forestry Association	Ministry for Primary Industries
Jane Davidson Ministry for Primary Industries	Ministry for Primary Industries
Bruce Manley School of Forestry, University of Canterbury	Ministry for Primary Industries
Peter Oliver City Forests	New Zealand Forest Owners Association
John Novis Ministry for Primary Industries	Ministry for Primary Industries
Guy Sanders Statistics New Zealand	Ministry for Primary Industries
Manager Resource Information and Analysis Ministry for Primary Industries	Ministry for Primary Industries

APPENDIX 5: THE NEFD STEERING COMMITTEE'S TERMS OF REFERENCE

The New Zealand Forest Owners Association and the Ministry for Primary Industries have agreed that the Steering Committee shall:

- produce a five-year strategic plan, which outlines long term strategies to maintain the quality of planted production forest resource information collected and plans for projects of a longer-term nature such as wood supply forecasts. This strategic plan needs to be submitted through the Director-General for Primary Industries and the Board of the New Zealand Forest Owners Association.
- prepare an annual work plan and budget for NEFD activity, outlining details of statistics to be collected, how they are to be handled, the analysis to be performed and products to be produced during the year. This work plan is to be submitted through the Deputy Director-General for Primary Industries to the Board of the New Zealand Forest Owners Association by 31 May of each year (Review and approval by the Director-General and the Board are required by 30 June of that year).
- prepare an annual report reviewing the year's work and achievements. This report is to be submitted to the Deputy Director-General for Primary Industries and to the Board of the New Zealand Forest Owners Association by 31 July each year.
- monitor user satisfaction with the NEFD outputs through the use of client surveys and through direct discussion with user representatives.
- advise the Ministry for Primary Industries Senior Management Team and the Forest Owners Association Board of any significant issues that the Steering Committee is unable to resolve.
- oversee the preparation of each edition of the *National Exotic Forest Description*.
- commission forecasts of future wood supply from New Zealand's planted production forests.
- ensure that all users are able to subscribe to NEFD reports on an equitable basis, with no barriers to access.
- advertise and promote the availability of NEFD reports.
- sponsor research by suitable bodies to improve the quality of NEFD information.

APPENDIX 6: REFERENCES

AgriQuality New Zealand (2005) *Small Forest Grower Survey Report*.

Eyre, J (1995) Predicting and Measuring New Planting from Nursery Surveys. *New Zealand Journal of Forestry*, August 1995, pp 45–46.

Manley B; Somerville O; Turbitt M; Lane P (2003) Review of New Planting Estimates. *New Zealand Journal of Forestry*, November 2003, pp 34–37.

Manley, B (2011) *2010 Deforestation Survey*. University of Canterbury. <http://www.maf.govt.nz/news-resources/publications>.

Ministry of Agriculture and Forestry (2010) *National Exotic Forest Description as at 1 April 2009*.

Ministry for Primary Industries (2011) *Annual Log and Roundwood Removal Statistics*. <http://www.mpi.govt.nz/news-resources/statistics-forecasting/forestry/annual-log-and-roundwood-removal-statistics.aspx>

Ministry of Forestry (1996) *A National Exotic Forest Description as at 1 April 1995*.

Ministry of Forestry (1996) *NEFD Regional Yield Tables as at 1 April 1995*.

New Zealand Forest Owners Association (2012) *New Zealand Forest Industry Facts & Figures 2009/2010*.

Statistics New Zealand (2009) *2007 Agricultural Production Census*. http://www.stats.govt.nz/browse_for_stats/industry_sectors/agriculture/agriculturalproduction_hotpjun07final.aspx

Statistics New Zealand (2010) *2010 Agricultural Production Survey*. <http://www.stats.govt.nz>

Statistics New Zealand (2011) *2011 Agricultural Production Survey*. <http://www.stats.govt.nz>

APPENDIX 7:

FURTHER INFORMATION

The area data and yield tables and additional information are available from:

Resource Information and Analysis

Ministry for Primary Industries

PO Box 2526

Wellington 6140

Telephone: 0800 00 83 33

Facsimile: 64-4-894 0741

Email: stats_info@mpi.govt.nz

An electronic copy of this report is available on the New Zealand Ministry for Primary Industries internet site: <http://www.mpi.govt.nz>. The tables from this electronic report can be downloaded directly into Microsoft Excel.

Area and yield data are available from the NEFD dataset for any combination of territorial authority area, species, silvicultural regime and age class. The Ministry for Primary Industries will provide such data on request, subject to its standard charging procedures. This information can be provided electronically or in printed form.

For reasons of confidentiality, data on the resources of individual forest growers and data at a lower level of resolution than that published in this report will not be released without the prior written consent of the forest owner(s) concerned.

The Ministry for Primary Industries welcomes any comments on the presentation of this report. These can be directed to the Information and Analysis unit, based at the Wellington address above.