



Australian Government

Department of Agriculture, Fisheries and Forestry  
Bureau of Rural Sciences

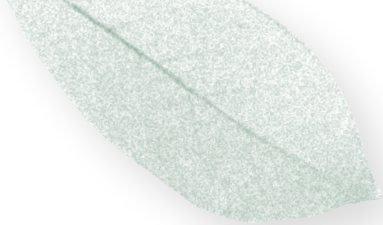
# Australia's PLANTATIONS

## KEY POINTS

- Australia's National Plantation Inventory provides an annual update of timber plantation areas in each state and territory showing trends in plantation development.
- The total area of Australia's plantation estate increased by 2.4% in 2009, from 1.97 million to 2.02 million hectares. That area is comprised of about 0.99 million hectares (49%) of hardwood species, 1.02 million hectares (51%) of softwood species and a small area of mixed plantings.
- A total of 49 658 hectares of new plantations were reported established in 2009, 31% less than in 2008.
- The total plantation area has increased by about 51% in the past ten years. The increase is mostly hardwood plantations, the area of which increased by more than 150% in ten years while the softwood plantation area increased by 8%. The rate of increase has slowed since 2005.

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2010 INVENTORY UPDATE



# TOTAL ESTATE

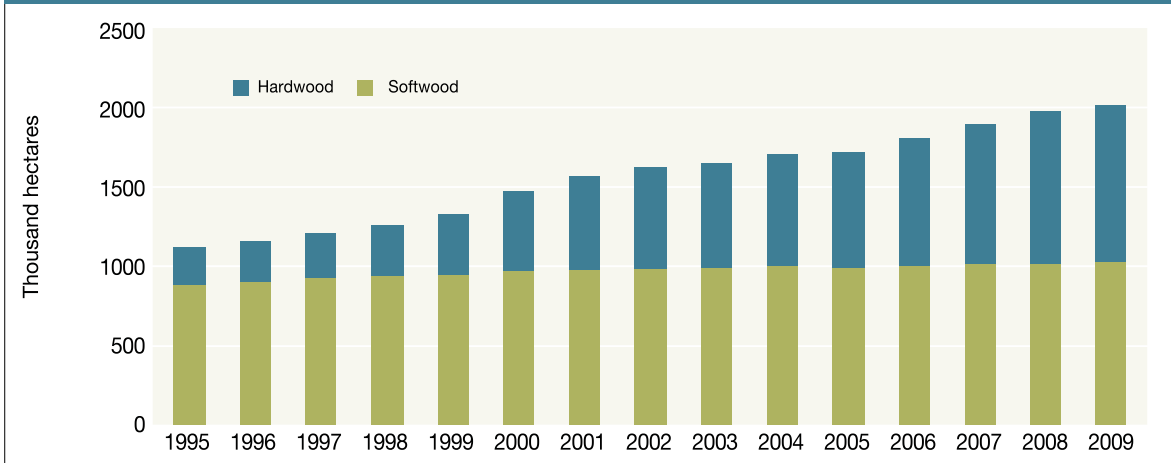
Australia's timber plantation estate continued to expand in 2009 (Figures 1 and 2), but at a slower rate than for several years. In 2009, the total recorded area of timber production plantations was 2 020 226 hectares (Table 1) compared with 1 972 535 hectares in 2008. A total of 49 658 hectares of new planting was reported for 2009. That increase was off-set by reductions caused by re-measurements and change of land use after harvesting or wildfire. After allowing for those reductions, the total area increase in 2009 was about 47 000 hectares (2.4%).

In 2009, the total area of softwood plantations was 1 020 051 hectares, about 0.6% more than in 2008. The total area of hardwood plantations was 990 945 hectares, 4.4% more than in 2008. Hardwoods now constitute 49% of all plantations, compared with 29% in 1999.

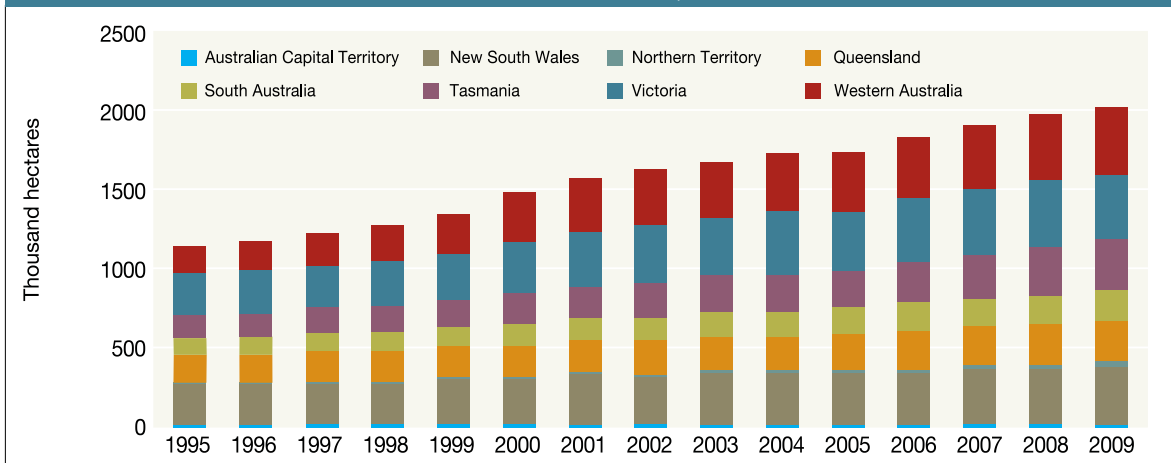
Plantations established for wood production cover a small proportion (0.26%) of Australia's total land area. The plantation area is smaller than that of several agricultural crops and land uses (Table 2).

Figure 3 shows the proportions of hardwood and softwood plantations in each state and territory in 2009.

**FIGURE 1: TOTAL PLANTATION AREA BY TYPE, AUSTRALIA, 1995–2009**



**FIGURE 2: TOTAL PLANTATION AREA BY STATE AND TERRITORY, 1995–2009**

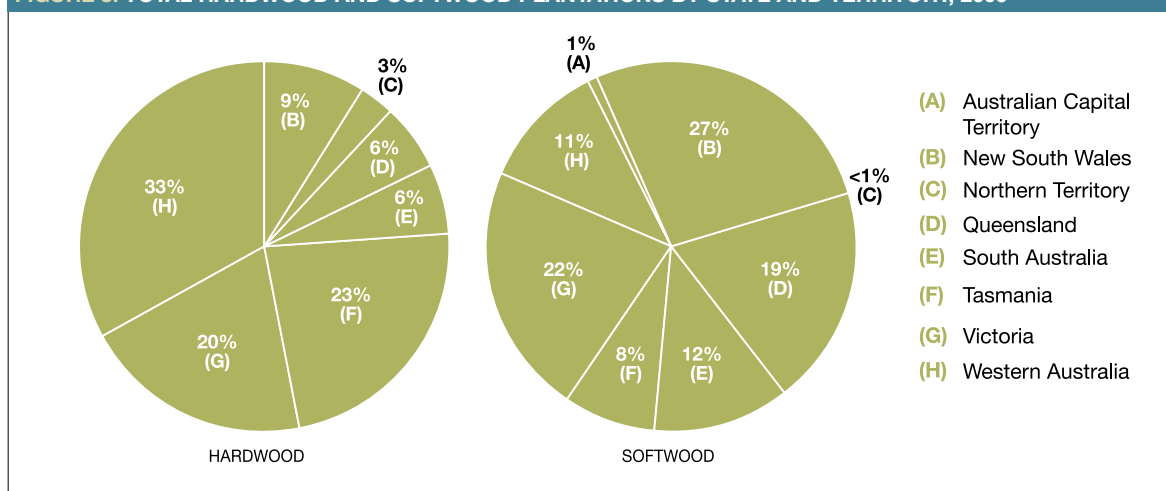


**TABLE 1: TOTAL PLANTATION AREA, BY STATE AND TERRITORY, 2009 (HECTARES)**

	Hardwood	Softwood	Other categories <sup>1</sup>	Total
Australian Capital Territory	0	7 870	0	7 870
New South Wales	92 541	287 820	2821	383 182
Northern Territory	29 599	2 239	0	31 838
Queensland	63 618	190 663	2108	256 389
South Australia	58 669	123 419	457	182 545
Tasmania	231 992	77 098	100	309 190
Victoria	202 703	220 009	1438	424 150
Western Australia	311 823	110 934	2305	425 062
<b>Total</b>	<b>990 946</b>	<b>1 020 051</b>	<b>9229</b>	<b>2 020 226</b>
<b>Change since 2008</b>	<b>+4.4%</b>	<b>+0.6%</b>	<b>-0.3%</b>	<b>+2.4%</b>

<sup>1</sup> Includes areas of mixed hardwoods and softwoods and areas for which tree species were not reported.

**FIGURE 3: TOTAL HARDWOOD AND SOFTWOOD PLANTATIONS BY STATE AND TERRITORY, 2009**



**TABLE 2: PLANTATIONS AND OTHER LAND USES, AUSTRALIA**

Land use	Area (million hectares)	Proportion of total land area (%)
<b>Plantation forests</b>	<b>2.0</b>	<b>&lt;0.3</b>
Native forests	147	19
Other native vegetation	147	19
Agricultural and horticultural crops		
- wheat	13.1	
- barley and other grains	6.8	
- horticulture	5.7	
- canola and other oilseeds	2.1	
- others	2.0	
- Total	29.7	4
Grazing	443	58
<b>Total land area</b>	<b>769</b>	<b>100</b>

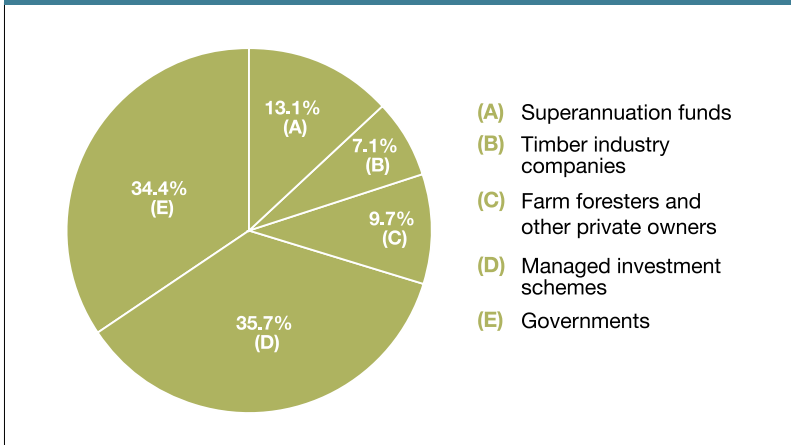
Sources: Australian Bureau of Statistics; National Forest Inventory.

# OWNERSHIP

Private plantations now make up 62% of the total plantation estate; public plantations are about 33% and jointly-owned plantations 5% (Table 3). The private plantations include an estimated 100 000 hectares of small scale farm forestry plantings. The jointly-owned plantations include, for example, eucalypt plantations established by government agencies on farmland in New South Wales and Queensland for sawlog production and pine plantations established under salinity management programs on farmland in Western Australia. They also include some plantations established on public land using non-government sources of funding.

Figure 4 shows the total plantation area by ownership category that enables different sources of funding to be identified. The jointly owned plantations are apportioned to industry categories, leading to slightly different public and private ownership proportions than Table 3. The proportion owned by managed investment schemes increased to more than 35% in 2009 and is now marginally greater than the government sector. The proportion owned by superannuation funds increased when a fund manager purchased softwood plantations in South Australia from a timber industry company.

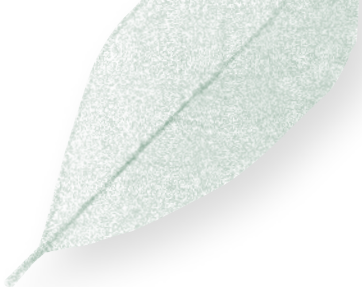
**FIGURE 4: OWNERSHIP OF THE TOTAL PLANTATION ESTATE BY INDUSTRY CATEGORY, 2009**



**TABLE 3: TOTAL PLANTATION AREA BY STATE AND TERRITORY AND TREE OWNERSHIP CLASS, 2009 (HECTARES)**

State	Public	Private	Joint <sup>1</sup>	Total
Australian Capital Territory	7 870	0	0	7 870
New South Wales	247 015	131 362	4 805	383 182
Northern Territory	0	31 838	0	31 838
Queensland	198 941	54 677	2 771	256 389
South Australia	86 529	96 015	0	182 545
Tasmania	32 778	216 193	60 220	309 190
Victoria	4 352	412 757	7 040	424 150
Western Australia	81 035	308 911	35 115	425 062
<b>Total</b>	<b>658 521</b>	<b>1 251 753</b>	<b>109 952</b>	<b>2 020 226</b>

<sup>1</sup> This includes some small areas for which ownership details were not reported.



# NATIONAL PLANTATION INVENTORY REGIONS

The National Plantation Inventory (NPI) regions are geographic groupings based mainly on supply of logs to the industries that manufacture timber products for the Australian and export markets. Table 4 and Figure 5 show that, in 2009, Western Australia (which is a single NPI region) had about 22% of the total plantation estate, including 32% of all hardwoods. The Green Triangle region had the next largest proportion with about 17%, comprised of nearly the same area of hardwoods and softwoods. The inland regions of New South Wales and Victoria that lie within the Murray-Darling Basin have

significant areas of softwood plantations but few hardwood plantations.

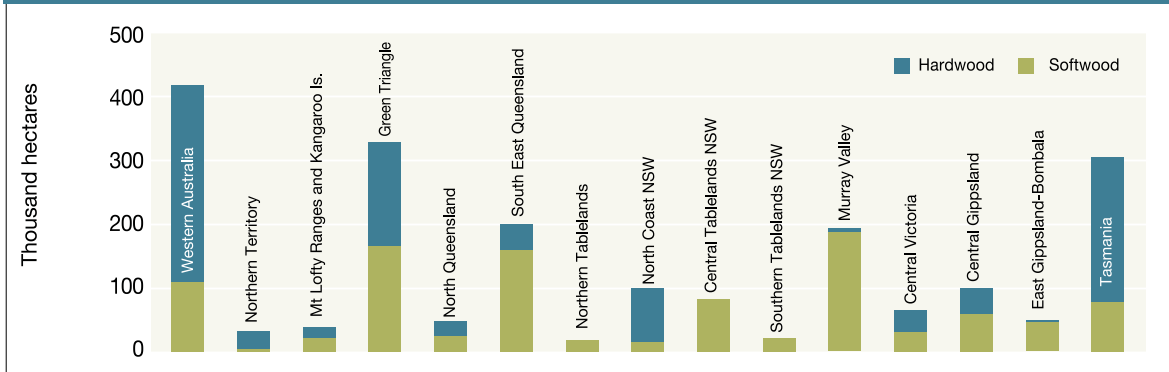
The fastest rate of increase in total plantation area since 2005 has been in the Northern Territory, Tasmania, North Coast New South Wales and North Queensland. The regions with the slowest rate of increase since 2005 include the Central Tablelands, Murray Valley and other regions that fall within the Murray-Darling Basin catchment. Most plantations in those regions are softwoods that produce timber for the Australian building and paper industries.

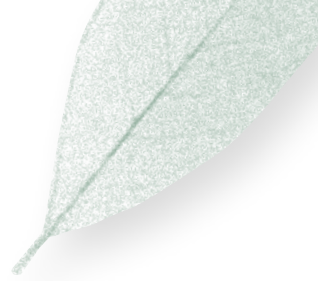
**TABLE 4: TOTAL PLANTATION AREA BY NATIONAL PLANTATION INVENTORY REGION, 2009 (HECTARES)**

Region <sup>1</sup>	Hardwoods	Softwoods	Other categories <sup>2</sup>	Total
Western Australia	311 823	110 934	2305	425 062
Northern Territory	29 599	2 239	0	31 838
Mount Lofty Ranges and Kangaroo Is.	17 896	19 445	144	37 485
Green Triangle	164 649	166 937	2040	333 626
North Queensland	21 849	26 401	1000	49 250
South East Queensland	41 668	161 849	1108	204 625
Northern Tablelands	1 933	14 871	314	17 118
North Coast New South Wales	86 296	16 069	984	103 349
Central Tablelands New South Wales	984	80 474	0	81 458
Southern Tablelands New South Wales	416	21 602	1	22 019
Murray Valley	6 761	188 705	106	195 572
Central Victoria	31 620	31 801	40	63 461
Central Gippsland	38 828	58 803	821	98 452
East Gippsland-Bombala	4 633	42 823	266	47 721
Tasmania	231 992	77 098	100	309 190
<b>Total</b>	<b>990 946</b>	<b>1 020 051</b>	<b>9229</b>	<b>2 020 226</b>

1. If the exact location of plantations is not known, in some cases it is difficult to assign them to specific regions. The data presented here are a reliable guide but might be revised later. The boundaries for these regions are shown on the back cover.  
 2. Includes areas of mixed hardwoods and softwoods and those for which tree species were not reported.

**FIGURE 5: HARDWOOD AND SOFTWOOD PLANTATION AREA BY REGION, 2009**





# NEW PLANTATIONS

New plantations are those established on land not previously used for plantation forestry. A total of 49 658 hectares of new plantations was reported established in 2009 (Table 5), about 31% less than in 2008. This continues the decline in the new area reported since 2007 (Figure 6). The new area comprised 43 231 hectares of hardwoods and 6 427 hectares of softwoods.

Managed investment schemes funded about 71% of the new plantations in 2009, compared with 81% in the previous year. Government agencies planting on public land and in joint ventures on private land established 17% of the new plantations. Timber industry companies, superannuation funds and other private owners established the remaining 12%.

Tasmania had the largest area of new plantations in 2009, with 30% of the national total. New South Wales has 26%. South Australia had the smallest proportion, with less than 2%.

Continuing the trend from the 1990s, most (82.5%) of the new plantations established in 2009 are privately owned. Hardwoods, nearly all of which are privately owned, comprise 87%. Softwoods established by a range of public and private sector organisations and companies accounted for the remaining 13% of new area planted in 2008.

**TABLE 5: NEW AREAS BY STATE AND TERRITORY, 2009 (HECTARES)**

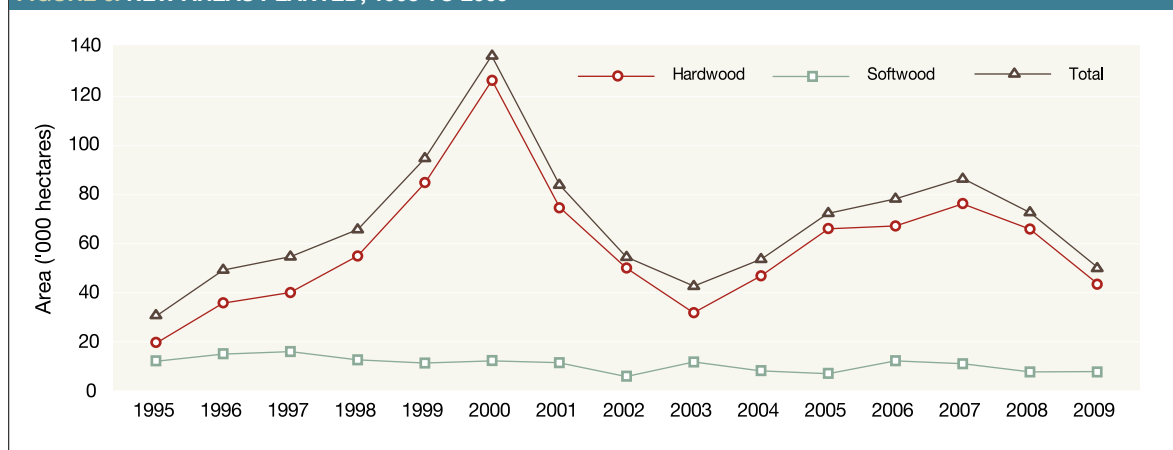
	Public		Private		Joint <sup>1</sup>		Total	
	HW	SW	HW	SW	HW	SW	HW	SW
New South Wales	0	200	10 874	2054	0	0	10 874	2254
Northern Territory	0	0	2300	0	0	0	2300	0
Queensland	1691	1233	3925	0	0	0	5616	1233
South Australia	0	494	243	54	0	0	243	548
Tasmania	1592	0	12 555	126	777	0	14 924	126
Victoria	0	0	2459	490	0	0	2459	490
Western Australia	0	0	5916	0	900	1776	6816	1776
<b>Sub-total</b>	<b>3283</b>	<b>1927</b>	<b>38 271</b>	<b>2724</b>	<b>1677</b>	<b>1776</b>	<b>43231</b>	<b>6427</b>
<b>Total</b>	<b>5210</b>		<b>40 995</b>		<b>3453</b>		<b>49 658</b>	
<b>Proportion of total (%)</b>	<b>10.5</b>		<b>82.5</b>		<b>7.0</b>			

1. HW = hardwood; SW = softwood

2. No new plantations were established in the Australian Capital Territory.

3. 'Public' comprises plantations owned by governments; 'Private' comprises plantations owned by superannuation funds, timber industry companies, managed investment schemes and other private owners; 'Joint' comprises plantations owned jointly by public and private entities.

**FIGURE 6: NEW AREAS PLANTED, 1995 TO 2009**



# REFERENCES AND FURTHER READING

Australian Bureau of Agricultural and Resource Economics, Australian forest and wood products statistics.

Bureau of Rural Sciences publications:

Australia's Forests at a Glance 2010

Australia's Plantations 2006

Australia's Plantation Log Supply 2005–2049

Australia's State of the Forests Report 2008

Australian forest profiles – information sheet series:

Acacia, Callitris, Casuarina, Eucalypts, Mangroves,

Melaleuca, Rainforest and Plantations; poster:

Australia's forests.

**Bureau of Rural Sciences publications can be obtained from:**

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[www.brs.gov.au/plantations](http://www.brs.gov.au/plantations)

## **NATIONAL PLANTATION INVENTORY**

*The National Plantation Inventory (NPI), which is managed by the Bureau of Rural Sciences (BRS) as part of the National Forest Inventory, has reported on Australia's timber plantations since 1997. Annual updates assist strategic forest industry planning and decision-making by presenting information on total plantation area, new planting and ownership.*

*Data for NPI updates are collected by a survey of growers, grower representatives and state and territory agencies. The survey records the total plantation estate each year and plantations newly established on land that had not previously been used for plantations. Plantations are added if they had not previously been recorded, revised if earlier data were in error and deleted if the plantations have been permanently removed. A substantial area of plantations is harvested each year and some areas are destroyed. Replanting might not take place for some time after harvesting but, unless advised of a change in land use, the NPI records such fallow land as plantation. Although all care is taken to reconcile data, inconsistencies in the area reported from year to year may occur.*

*Individual grower information submitted to the NPI is confidential. For reporting purposes, data from individual growers are aggregated within regions or states and territories and are not provided individually to other parties without the consent of the data owner.*

*The data presented here do not capture all small-scale, farm forestry planting, although they do include those farm forests reported in the BRS publication Australia's Plantations 2006.*

## **PREFERRED WAY TO CITE THIS PUBLICATION**

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## PLANTATION INVENTORY REGIONAL BOUNDARIES



Source: National Plantation Inventory, 2006.

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