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Australia's forests at a glance 2019

with data to 2017–18

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Acknowledgements

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Australia's forests in summary	
Total land area	**768.9 million hectares**
Total forest area	**134.0 million hectares**
Forest area as a proportion of land area	17%
Native forest area	131.6 million hectares
Forest area on nature conservation reserve tenure	21.8 million hectares
Native forest area managed for the protection of biodiversity	46.0 million hectares
Native forests available and suitable for commercial wood production	28.1 million hectares
Public native forests available and suitable for commercial wood production	6.3 million hectares
Leasehold and private native forests available and suitable for commercial wood production	21.8 million hectares
Area of commercial plantation forest	1.94 million hectares
Total log volume harvested	**32.9 million m^3**
Total commercial plantation log volume harvested	28.7 million m^3
Total native forest log volume harvested (including cypress pine)	4.2 million m^3
Total value of imports of wood products	**$5.6 billion**
Total value of exports of wood products	**$3.6 billion**

Major wood product imports (value)	
Paper and paperboard	$2,105 million
Manufactured paper products	$653 million
Sawnwood	$451 million
Miscellaneous forest products	$1,454 million
Major wood product exports (value)	
Woodchips	$1,328 million
Paper and paperboard	$963 million
Roundwood	$644 million
Recovered paper	$248 million
Estimated number of people employed in ABS categories of forestry, logging and wood manufacturing	76,200 people
Forest product manufacturing sales and service income	$23.9 billion
Forestry and forest product manufacturing industries contribution to GDP	0.5%

ABS Australian Bureau of Statistics. **GDP** Gross domestic product.
Note: Area data are as at 2016 except for commercial plantation area and total forest area, which are as at 2017–18. Harvest, economic and trade data are as at 2017–18. Employment, sales and service income and contribution to GDP are as at 2017–18.

Contents

National overview

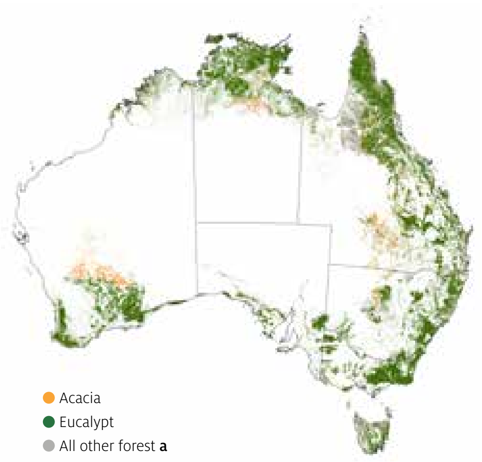
Forest area

Australia's 134.0 million hectares of forest cover about 17% of the continent. This represents about 3% of the world's forest area on 5% of the world's land area.

Queensland has 39% of Australia's forest (51.8 million hectares), the Northern Territory has 18% (23.7 million hectares), Western Australia has 16% (21.0 million hectares) and New South Wales has 15% (20.4 million hectares).

A forest is an area, incorporating all living and non-living components, that is dominated by trees having usually a single stem and a mature or potentially mature stand height exceeding 2 metres and with existing or potential crown cover of overstorey strata equal to or greater than 20%. This includes Australia's diverse native forests and plantations, regardless of age, and encompasses areas of trees that are sometimes described as woodlands.

Australia's forest cover, by main types, 2016



a Forest mapped as 'All other forest' comprises: native forest types Callitris, Casuarina, Mangrove, Melaleuca, Rainforest and 'Other native forest', and the forest categories 'Commercial plantations' and 'Other forest'.
Source: National Forest Inventory, ABARES

Australia's forest area, by jurisdiction, 2017–18

Jurisdiction	Total forest area ('000 hectares)	Proportion of national forest area (%)
New South Wales	20,381	15
Victoria	8,228	6
Queensland	51,832	39
South Australia	5,054	4
Western Australia	20,961	16
Tasmania	3,698	3
Northern Territory	23,737	18
Australian Capital Territory	143	0.1
Australia	**134,032**	**100**

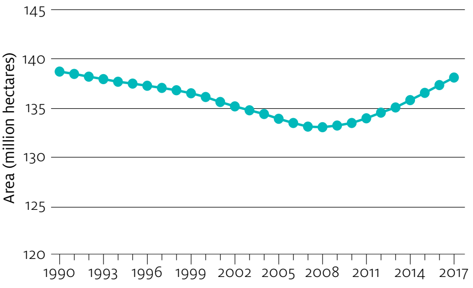
Note: Totals may not tally because of rounding. Calculations assume that changes in the area of commercial plantations since 2017–18 have not involved changes in the areas of forest classified as 'Native forest' or 'Other forest'.
Sources: *Australian forest and wood products statistics, September and December quarters 2018*

Change in forest area over time

The best measure of change in forest area over time is derived from annual data published in the Australian National Greenhouse Accounts *National Inventory Report 2017 Volume 2* (DoEE 2019).

The *National Inventory Report 2017 Volume 2* data are based on an approach that includes only changes resulting from human drivers such as forest clearing and plantation establishment. The data show a net increase in forest cover of 4.1 million hectares over the period 2011 to 2017. This figure does not take account of the variation in forest cover over time caused by drought, fire and disease, or the recovery or regeneration of forests after these disturbances.

Forest area change, 1990 to 2017



Type and class of forest

Australia's forests are classified nationally into three categories: 'Native forest', 'Commercial plantations' and 'Other forest'.

Australia's 'Native forest' category is dominated by the forest types Eucalypt (75% of the total forest area), Acacia (8%) and Melaleuca (5%), while only a small area is Rainforest (3%). The primary determinants of forest type distribution are climate and soil properties, followed by fire frequency and intensity.

Over half Australia's commercial plantation area is exotic softwood species (predominantly radiata pine); the other half is mostly native hardwood species (predominantly eucalypts).

The 'Other forest' category comprises a small area of mostly environmental plantings, non-commercial plantations and forests of various types.

Australia’s forest area, by forest type, 2017–18

Forest type	Area ('000 hectares)	Proportion of national forest area (%)
Acacia	10,813	8.1
Callitris	2,011	1.5
Casuarina	1,236	0.9
Eucalypt	101,058	75.4
Mangrove	854	0.6
Melaleuca	6,382	4.8
Rainforest	3,581	2.7
Other native forest	5,679	4.2
Total native forest	**131,615**	**98.2**
Softwood	1,037	0.8
Hardwood	896	0.7
Unknown	9.7	0.0
Total commercial plantations	**1,942**	**1.4**
Other forest	**474**	**0.4**
Total forest	**134,032**	**100.0**

Note: Totals may not tally because of rounding. Calculations assume that changes in the area of ‘Commercial plantations’ since 2017–18 have not involved changes in the areas of forest classified as ‘Native forest’ or ‘Other forest’.
Sources: *Australian plantation statistics 2019 update; Australia’s State of the Forests Report 2018*

Native forest crown cover

Australia's native forests are classified nationally into three crown cover classes—woodland forest, open forest and closed forest—according to existing or potential crown cover. Crown cover is the proportion of ground area covered by tree canopies.

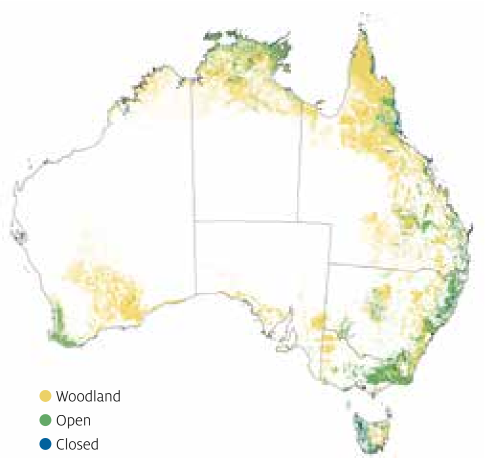
The Eucalypt forest type is the largest component of both woodland forest and open forest. The Rainforest forest type is the largest component of closed forest.

Native forest areas, by crown cover class, Australia, 2016

Crown cover class	Total ('000 hectares)
Woodland (20–50% crown cover)	91,455
Open (>50–80% crown cover)	33,962
Closed (>80–100% crown cover)	3,622
Unknown	2,576
Total native forest	**131,615**

Note: Totals may not tally because of rounding.
Source: *Australia's State of the Forests Report 2018*

Australia's native forest cover, by crown cover class, 2016



Note: Forest mapped as 'Unknown' forest crown cover is not visible at this scale and is therefore not included in the legend.
Source: National Forest Inventory, ABARES

Native forest height

Australia's native forests are classified nationally into three height classes—low forest, medium forest and tall forest—according to existing or potential mature stand height. Most forest height data are collected in forests where wood is harvested.

Native forest area, by height class, Australia, 2016

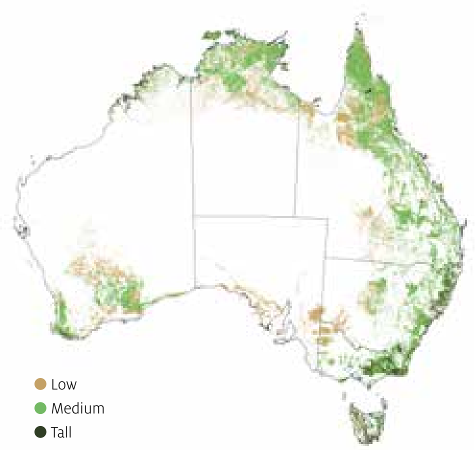
Height class	Total ('000 hectares)
Low (2–10 metres)	39,462
Medium (>10–30 metres)	83,503
Tall (>30 metres)	6,074
Unknown	2,576
Total native forest	**131,615**

Source: National Forest Inventory, ABARES

Did you know?

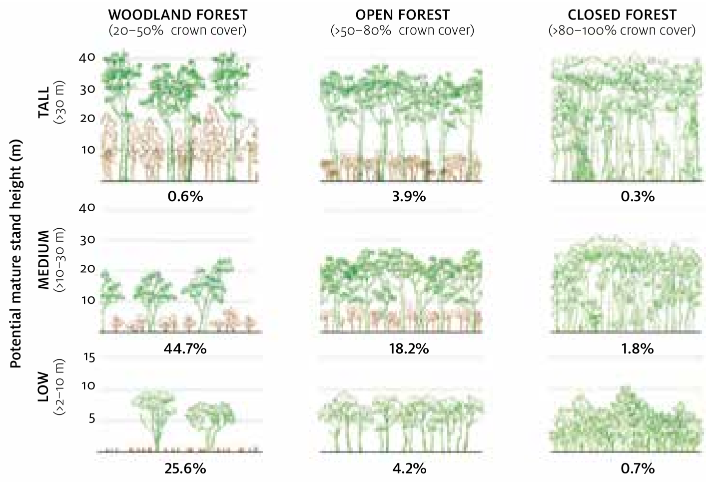
What many people might typically think of as forests—stands of tall, closely spaced trees (>30 metres tall and >50% crown cover)—cover only 4% of Australia's total forest area.

Australia's native forest cover, by height class, 2016



Note: Forest mapped as 'Unknown' forest height is not visible at this scale and is therefore not included in the legend.
Source: National Forest Inventory, ABARES

Native forest crown cover and height classes, and area proportions, Australia, 2016



Note: Percentages are area proportions of each known cover class/height class combination in Australia's native forest area excluding that area for which height and cover class is unknown.
Source: *Australia's State of the Forests Report 2018*

Eucalypt mallee forest

Mallee eucalypts are multi-stemmed, with stems arising from a woody base (lignotuber or mallee root). Their deep, extensive root systems can access groundwater in more arid environments.

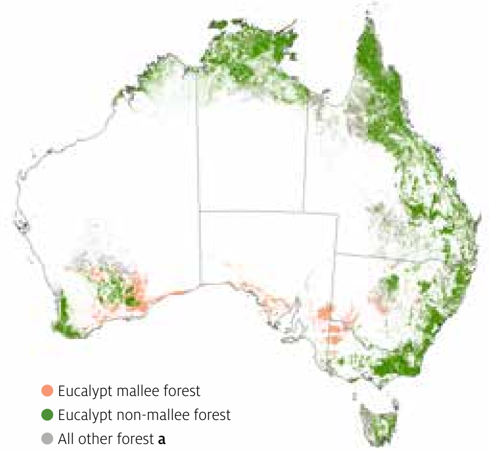
Mallee forests generally do not exceed 6 metres in height and have a flattened open or woodland canopy. Most mallee forests are found in drier inland regions of southern Australia, where annual rainfall averages 250–400 millimetres.

The total area of mallee forest in Australia is 13.4 million hectares. Most mallee forests are in Western Australia (47% of all mallee forests) and South Australia (29%).

Did you know?

Some eucalypt species can grow in either a mallee growth form or a tree growth form, depending on environmental conditions.

Australia’s eucalypt mallee and non-mallee forest, 2016



a Forest mapped as ‘All other forest’ comprises: native forest types Acacia, Callitris, Casuarina, Mangrove, Melaleuca, Rainforest and ‘Other native forest’, and the forest categories ‘Commercial plantations’ and ‘Other forest’.
Source: National Forest Inventory, ABARES

Old-growth forests

Of the 19 million hectares of forest in Australia assessed for old-growth status in the 10 Regional Forest Agreement regions, 4.5 million hectares (23%) was classified as old-growth forest. In 2017, 76% of forest classified as old-growth was estimated to be in formal or informal nature conservation reserves.

Old-growth forests are ecologically mature forests where the effects of past disturbances are now negligible. These forests generally have a layered structure, with large (diameter and height) overstorey trees, a well-developed understorey of other tree species and shrubs and ecological features such as dead standing trees and large decaying and hollow logs on the forest floor.

Did you know?

Changed fire regimes, natural ageing and disease are the most significant threats to old-growth forest across all tenures.

Native forest tenure and ownership

Tenure is important in native forest management. The owner of the land (and in most cases the forest) has primary responsibility for its management. Six national tenure categories are recognised for the purposes of Australia's National Forest Inventory:

- **Multiple-use public forest**—publicly owned forest on which government agencies manage a range of forest values including wood harvesting, water supply, biodiversity conservation, recreation and environmental protection.
- **Nature conservation reserve**—publicly owned land formally reserved for conservation and recreational purposes including national parks, nature reserves, and state and territory recreation and conservation areas.
- **Other Crown land**—reserved for purposes including utilities, mining, water catchments and use by Indigenous communities.
- **Private forest**—land held under freehold title and private ownership.
- **Leasehold forest**—Crown land held under leasehold title and generally regarded as privately managed, including land with special conditions for designated Indigenous communities.
- **Unresolved tenure**—areas of unknown tenure.

Native forest area, by tenure type, Australia, 2016

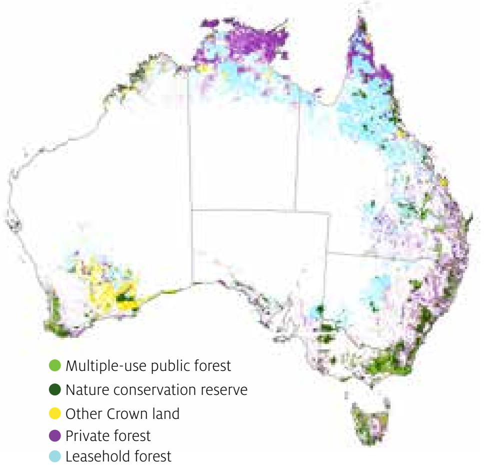
Tenure	Area ('000 hectares)	Proportion of total (%)
Multiple-use public forest	9,772	7.4
Nature conservation reserve	21,719	16.5
Other Crown land	11,042	8.4
Private forest	41,031	31.2
Leasehold forest	47,246	35.9
Unresolved tenure	805	0.6
Total native forest	**131,615**	**100.0**

Note: Totals may not tally because of rounding.
Source: *Australia's State of the Forests Report 2018*

Publicly managed forests (forests managed by government agencies) include forest under multiple-use public forest, nature conservation reserve and other Crown land tenures. Of the 131.6 million hectares of native forest in Australia, about one-third is publicly managed.

Privately managed forests include forest on private and leasehold tenures. Of the 131.6 million hectares of native forest in Australia, about two-thirds are privately managed.

Australia's forest cover, by tenure, 2016



Note: Forest mapped as 'Unresolved tenure' is not visible at this scale and is therefore not included in the legend.
Source: National Forest Inventory, ABARES

Did you know?

The highest proportion of native forest area under private management is in the Northern Territory (96%) and Queensland (82%).

Forest managed for protection of biodiversity

Forty-six million hectares of Australia's native forest (35% of the native forest area) is reported as managed for the protection of biodiversity. This comprises legally covenanted private land, formal and informal nature conservation reserves, and other protected areas on publicly managed land, including areas managed for the protection of biodiversity in multiple-use public forests.

According to the National Reserve System—Australia's network of protected areas—nature conservation is the primary management intent for 33.6 million hectares (25% of Australia's forests).

All the national native forest types in Australia (except Acacia forest, at 9.6%) are represented in the National Reserve System at levels above the 10% area proportion target recommended by the International Union for Conservation of Nature.

A total of 21.8 million hectares of Australia's forest area is on nature conservation reserve tenure, which represents 16% of Australia's forest area. This figure is lower than that listed in the National Reserve System because some reserves have a different formal tenure type, which can be either private, multiple-use public forest, leasehold or other Crown land.

Indigenous owned or managed forests

The Indigenous forest estate comprises forests owned or managed by Aboriginal and/or Torres Strait Islander peoples.

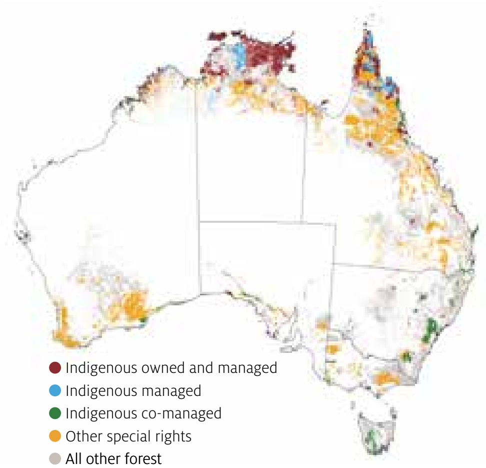
A total of 52% of Australia's forests (69.5 million hectares) are under either 'Indigenous owned and managed', 'Indigenous managed', 'Indigenous co-managed' or 'Other special rights'.

Indigenous owned or managed forests, Australia, 2016

Category	Area ('000 hectares)
Indigenous owned and managed	17,989
Indigenous managed	4,907
Indigenous co-managed	5,731
Other special rights **a**	40,916
Total	**69,543**

a Lands subject to native title determination and active Indigenous Land Use Agreements.
Source: *Australia's State of the Forests Report 2018*

Forests on the Indigenous estate, Australia, 2016



Source: National Forest Inventory, ABARES

Did you know?

Of the 69.5 million hectares of forested land in the Indigenous estate, 47.8 million hectares (69%) is in Queensland and the Northern Territory.

Forest certification

Forest management and chain-of-custody certification assures Australian and international buyers that the forest products they purchase originate from sustainably managed and legally harvested native forests and plantations.

Accredited third-party certification bodies conduct forest management and chain-of-custody certification in Australia. They use standards developed under the Responsible Wood Certification Scheme (RWCS) or the Forest Stewardship Council (FSC) scheme.

The RWCS is endorsed by the international Programme for the Endorsement of Forest Certification. The FSC scheme applies FSC's international Principles and Criteria of Responsible Forest Management to the Australian context.

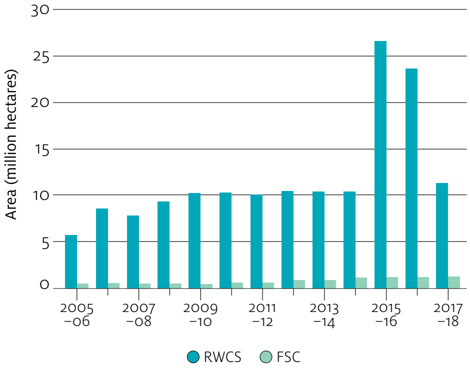
Both schemes are voluntary, and also issue chain-of-custody certificates that identify and track certified wood and wood products through the supply chain.

The total area of native forest and commercial plantations under FSC forest management certification in Australia is 1.2 million hectares, and the total area under RWCS certification is approximately 11.4 million hectares. Together these figures include most public native forests managed for wood production.

Changes in the procedure used by the Queensland Department of Agriculture and Fisheries to account for leasehold land within Queensland's Defined Forest Area resulted in the large increase in the area certified by the RWCS in 2015 and the subsequent decrease in 2017.

Multiple-use public forest and private forest are also managed in accordance with codes of practice. Many forest managers use environmental management systems that comply with and are independently certified to an International Organization for Standardization standard.

Area of forest for which forest management is certified, Australia, 2005–06 to 2017–18



RWCS Responsible Wood Certification Scheme. **FSC** Forest Stewardship Council.
Notes: RWCS numbers are for June each year. FSC numbers are for March 2004, January 2005, February 2006, March 2007, January 2008–2011 and June 2012–2018. Some areas of forest have both AFCS and FSC certification.
Sources: *Australia's State of the Forests Report 2018*, Responsible Wood (responsiblewood.org.au), Forest Stewardship Council (fsc.org/en).

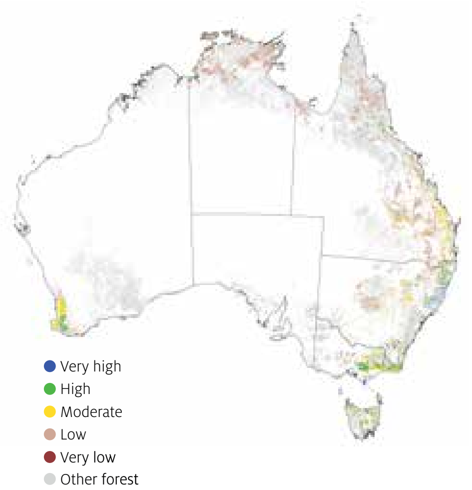
Native forest commerciality

Commerciality is a measure of expected volume yields of commercial sawlog (or veneer log or high-value equivalents) available from a forest stand over the long term, assuming good silvicultural practices are followed. Suitability for commercial wood production is derived from a combination of merchantability and productivity, and is only applied to land available for harvesting. Merchantability describes the suitability of a forest stand for commercial wood production, particularly of sawlogs, based on tree species and stand structure. Productivity describes the potential yield of sawlogs from a forest stand.

In 2016, 28.1 million hectares of native forest was both available and suitable for commercial wood production. This figure comprised 6.3 million hectares of multiple-use public forest and 21.8 million hectares of leasehold and private forests.

Of the 28.1 million hectares of available and commercial native forest, 7.7 million hectares were classed as moderate, high or very high commerciality comprising 3.8 million hectares of multiple-use public forest and 3.8 million hectares of leasehold and private forests. Much of the native forest on leasehold and private land contributes minimally to wood supply.

Commerciality of Australia's native forest, 2016



Note: Forest mapped as 'Other forest' includes forest of limited, possible or no commerciality; sandalwood; forest of unknown floristics and structure; conservation reserves where harvesting is excluded by covenant or regulation; and forests on formal nature conservation reserves, other Crown land and land of unresolved tenure. Commerciality is further restricted in the Northern Territory and northern Queensland because of accessibility and remoteness, and only limited harvesting occurs in those areas.
Source: *Australia's State of the Forests Report 2018*

Forests, wood products and carbon

During photosynthesis, forests absorb carbon dioxide from the atmosphere and store carbon in biomass. Forests also store carbon dioxide in forest litter and soil organic matter. A significant amount of carbon is also stored in wood products.

In 2016, a total of 22,093 million tonnes of carbon was held in Australia's forests and harvested wood products in service and in landfill. Almost all this carbon (21,949 million tonnes; 99%) was stored in living forest. In 2016, a total of 94 million tonnes of carbon was held in wood and wood products in service, an increase of 11 million tonnes from 2006. A total of 50 million tonnes of carbon was held in wood and wood products in landfill in 2016, an increase of 4 million tonnes from 2006.

Reductions in national forest carbon stocks are caused by forest clearing for agriculture, urban or commercial development, wood harvest from production forests, and natural disturbance events such as bushfires.

Increases in carbon stocks occur in forests that are regrowing from past disturbance events such as fire or wood harvesting and following planting events, afforestation and reforestation.

Carbon stored in Australia's forest lands and harvested wood products, 2016

Carbon pool	Carbon (million tonnes)
Forests	
Production native forests **a**	3,009
Non-production native forests **a**	18,668
Plantations	258
Total	**21,949**
Harvested wood products	
Wood and wood products in service	94
Wood and wood products in landfill	50
Total	**144**

a As defined for Australia's National Greenhouse Accounts (DoEE 2018).
Source: *Australia's State of the Forests Report 2018*

Fire in forests

The extent and intensity of forest fires in Australia vary with latitude and with seasonal rainfall. In northern Australia, where conditions are generally humid, low-intensity fires often burn across large areas. In south-eastern Australia, hot, dry and windy summers often lead to high-intensity bushfires that are difficult to control. Such fires can cause loss of human life and destroy trees, livestock, buildings, fences, bridges and power lines. Bushfires can also lead to soil erosion and degrade stream water quality. The resulting natural regrowth can reduce water yields.

Fire is also an important forest management tool in Australia. Planned fire is fire started in accordance with a fire management plan or planned burning program. Planned fire is used in fire-adapted forest types for forest regeneration, to promote growth after harvest, to maintain forest health and ecological processes and to reduce fuel loads so subsequent unplanned fires can be more easily managed.

Between 2011–12 and 2015–16, the cumulative area of fire in forests in Australia was 105.8 million hectares, comprising 72.9 million hectares of unplanned fire and 32.9 million hectares of planned fire. Over this period, 90% of Australia's cumulative area of forest fire was in Queensland and the Northern Territory.

Cumulative area of fire in forest, by jurisdiction, Australia, 2011–12 to 2015–16

Jurisdiction	Cumulative area of fire in forest ('000 hectares)	Proportion of cumulative area of fire in forest (%)
New South Wales	1,766	1.7
Victoria	1,025	1.0
Queensland	49,902	47.2
South Australia	302	0.3
Western Australia	7,022	6.6
Tasmania	208	0.2
Northern Territory	45,565	43.1
Australian Capital Territory	17	0.0
Australia	**105,807**	**100**

Note: Many areas (especially in northern Australia) were burnt more than once during the 5-year period. Totals may not tally because of rounding.
Source: *Australia's State of the Forests Report 2018*

Did you know?

After allowance is made for areas of forest burnt in multiple years, the total area of forest burnt one or more times during the period 2011–12 to 2015–16 was 55 million hectares.

Plantation forests

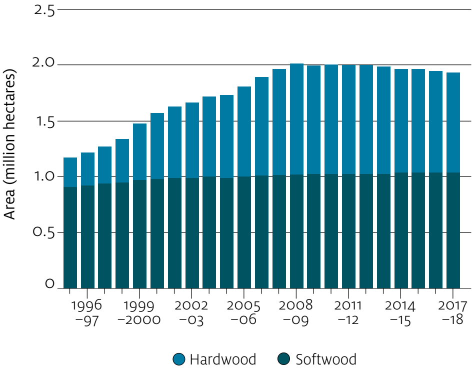
Plantations are intensively managed stands of native (mainly hardwood) or exotic (mainly softwood) tree species established by regular placement of seeds or seedlings. The primary purpose of commercial plantation forestry is wood production.

Area of plantations

Australia's total commercial plantation area was just under 2 million hectares in 2017–18, of which about half was softwood species (1,037,000 hectares) and the remainder was hardwood species (896,000 hectares). Victoria had the largest total area of plantations (420,600 hectares), followed by New South Wales (393,200 hectares) and Western Australia (361,700 hectares). Western Australia had the largest area of hardwood plantations and New South Wales the largest area of softwood plantations.

Did you know?
Eighty-seven per cent of Australia's total log harvest in 2017–18 was from plantation forests.

Plantation area, by type, Australia, 1995–96 to 2017–18



Note: 1995–96 to 2004–05 are calendar years (1995 to 2004) and 2005–06 to 2017–18 are financial years.
Source: *Australian plantation statistics 2019 update*

New plantations

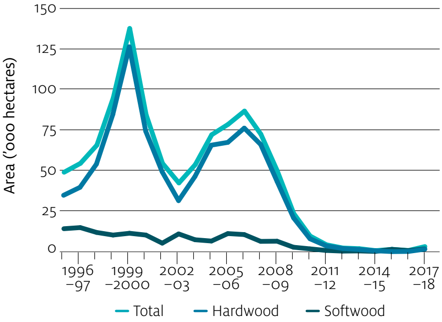
New plantations are those established on land not previously used for plantation forestry.

In 2017–18, a total of 3,150 hectares of new plantations were established, with slightly more softwood than hardwood established. However, the total plantation estate decreased by 12,400 hectares, with the decrease being due to loss of hardwood plantations.

The high rate of plantation expansion from 1995–96 to 2007–08 was financed mainly by the managed investment scheme sector. The establishment of new plantations has declined from a peak of 137,000 hectares of new plantations established in 1999–2000, to a low of 600 hectares established in 2014–15, and increased to 3,150 hectares in 2017–18.

Forty-nine per cent of new plantations established in 2017–18 were funded by governments, 47% by timber industry companies and the remaining 4% by institutional investors, managed investment schemes and farm foresters and other private owners.

New plantation area, Australia, 1995–96 to 2017–18



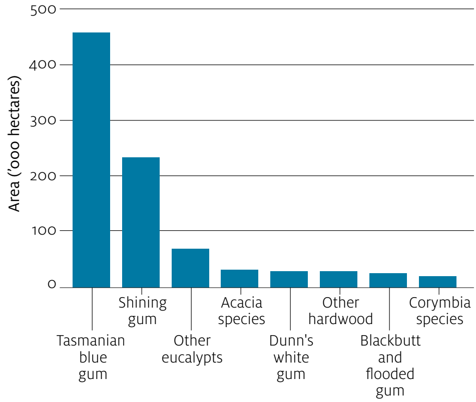
Note: 1995–96 to 2004–05 are calendar years (1995 to 2004) and 2005–06 to 2017–18 are financial years.
Source: *Australian plantation statistics 2019 update*

Plantation species

The hardwood plantation estate is dominated by Tasmanian blue gum (457,400 hectares; 51%) and shining gum (233,600 hectares; 26%), both of which are primarily managed for pulplog production. Most Tasmanian blue gum plantations are in Western Australia and the Green Triangle region of Victoria and South Australia, while most shining gum plantations are in Tasmania. Other regionally important hardwood species are blackbutt and flooded gum in north-east

New South Wales, Dunn's white gum in north-east New South Wales and south-east Queensland, and African mahogany in the Northern Territory.

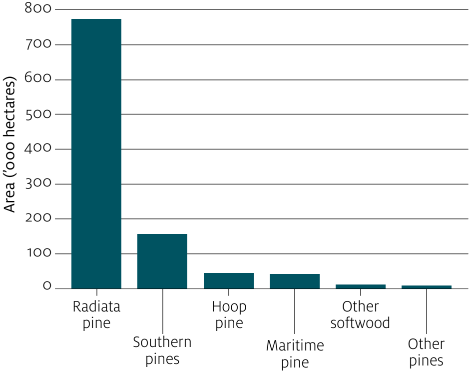
Hardwood plantation area, by species, Australia, 2017–18



Source: *Australian plantation statistics 2019 update*

The softwood plantation estate is dominated by radiata pine (772,400 hectares; 74%) and southern pines (156,400 hectares; 15%), both of which are managed for sawlog production. Most radiata pine plantations are in the Murray Valley, Green Triangle, Central Tablelands and Tasmania. Most southern pine plantations are in the South East Queensland region. Other regionally important softwood species are maritime pine in Western Australia, and the native species hoop pine in the South East Queensland region.

Softwood plantation area, by species, Australia, 2017–18



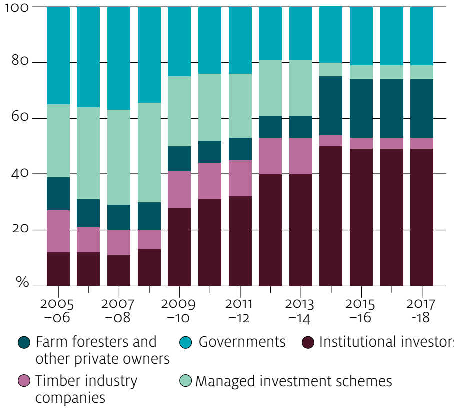
Source: *Australian plantation statistics 2019 update*

Plantation ownership

Plantation ownership has changed substantially over the past decade, with private investment managers buying rights to manage and harvest some managed investment scheme plantations and some public plantations.

In 2017–18, managed investment schemes accounted for 87,300 hectares (4.7%) of Australian plantations, compared with 670,700 hectares (34%) in 2007–08.

Area proportion of plantation ownership, by owner type, Australia, 2005–06 to 2017–18



Source: *Australian plantation statistics 2019 update*

Native forest wood production

The main source of Australia's native timber and wood-based products is multiple-use public forest in New South Wales, Queensland, Tasmania, Victoria and Western Australia. Private and leasehold forests provide smaller quantities of these products, depending on markets and the objectives and goals of owners and managers.

Substantial areas of multiple-use public forest are reserved or excluded from wood production. Other areas are not suitable for harvesting because of operational or merchantability constraints.

In 2016, 28.1 million hectares of native forest was both available and suitable for commercial wood production. When additional local restrictions to maintain and manage non-wood values are taken into account, the net harvestable area of Australia's multiple-use public native forests was 5.0 million hectares in 2016 (12% of public native forests). This is a decrease of 0.5 million hectares from the 5.5 million hectares net harvestable area in 2011.

The area of native forest harvested by public agencies annually is only a small proportion of the net harvestable area of forest in each jurisdiction.

Net area available for harvesting and area harvested in multiple-use public native forests, by jurisdiction, Australia, 2015–16

State	Net harvestable area (hectares) a	Net harvestable area as a proportion of total public native forest (%) b	Total area harvested in multiple-use public native forests (hectares) c
New South Wales	1,020,000	12	17,878
Victoria	824,000	12	4,819
Queensland	1,921,000	22	38,000
Western Australia	849,000	6	7,500
Tasmania	376,000	15	5,010
Total	**4,989,000**	**12**	**73,207**

a Net area of multiple-use public native forest available for wood harvesting after excluding areas legally restricted from wood harvesting, unsuitable for wood harvesting or where wood harvesting is not commercially viable, and areas where additional local management plans or codes of practice do not permit wood harvesting. Data do not include harvestable areas on leasehold forest, private forest, or other Crown land that are accessible to public forest agencies for wood harvesting. **b** Public native forest comprises the tenures multiple-use public forest, nature conservation reserve and other Crown land. **c** Includes 16,000 hectares harvested on Queensland native forests with Crown timber rights in the national tenure categories leasehold forest and other Crown land.
Note: Harvesting of native forest is not permitted in multiple-use public native forest in the Australian Capital Territory or South Australia. The Northern Territory does not have multiple-use public native forest. Source: *Australia's State of the Forests Report 2018*

Wood processing

Since 1999–2000, the number of hardwood sawmills has decreased by 79%, from 862 mills in 1999–2000 to 182 mills in 2016–17. The number of softwood and cypress pine sawmills has decreased by 73% over the same period, from 279 mills in 1999–2000 to 75 mills in 2016–17.

Softwood sawmills in 2016–17 were larger on average than they were in 1999–2000 and one-third of softwood sawmills had a log input capacity greater than 100,000 cubic metres a year in 2016–17. In contrast, 96% of hardwood sawmills had a log input capacity of less than 45,000 cubic metres a year in 2016–17.

In 2017–18, softwood and cypress pine sawmills produced an estimated 3.9 million cubic metres of sawnwood, while hardwood sawmills produced an estimated 711,000 cubic metres of sawnwood.

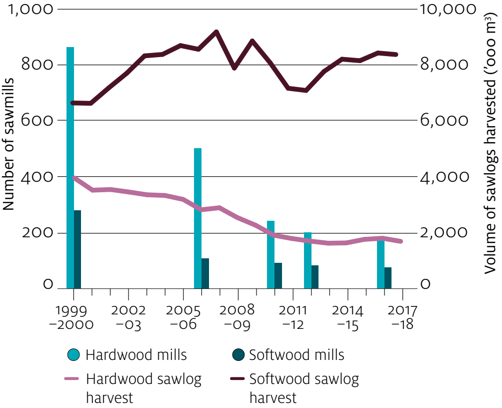
Hardwood sawmills predominantly use logs from public native forests. Smaller hardwood sawmills take a much larger proportion of their logs from private native forests than do larger hardwood sawmills.

Softwood sawmills (excluding cypress pine mills) source almost all their logs from plantation forests.

Cypress pine mills (which operate only in New South Wales and Queensland) source virtually all their logs from public native forests.

Other mills produce posts and poles, wood-based panels, pulp and paper, and export logs and woodchips.

Number of sawmills and volume of sawlogs harvested for domestic production, Australia, 1999–2000 to 2017–18



Source: ABARES

Wood processors in Australia, by processing capacity, Australia, 2016–17

Type	Log input capacity (m^3/yr)	Number of mills
Hardwood	Less than 3,000	71
	3,000 to less than 15,000	62
	15,000 to less than 45,000	42
	45,000 to less than 75,000	4
	75,000 to less than 100,000	0
	More than 100,000	3
	Total hardwood	**182**
Softwood	Less than 3,000	8
	3,000 to less than 15,000	8
	15,000 to less than 45,000	12
	45,000 to less than 75,000	5
	75,000 to less than 100,000	5
	More than 100,000	20
	Total softwood	**58**
Total cypress pine		**17**
Total post and pole		**19**
Total wood-based panel		**23**
Total pulp and paperboard		**14**
Total log and woodchip export		**32**

Source: ABARES

Logs and wood products

Log harvest and domestic production

Log harvest in Australia totalled 32.9 million cubic metres in 2017–18—a 16% increase since 2007–08. A total of 2.0 million cubic metres of sawlog (including native cypress pine) and 2.2 million cubic metres of pulplogs and other logs were harvested from Australia's native forests in 2017–18. In addition, 10.7 million cubic metres of sawlogs and 6.7 million cubic metres of pulplogs and other logs were harvested from Australia's softwood plantation estate in 2017–18, and 0.8 million cubic metres of sawlogs and 10.5 million cubic metres of pulplogs and other logs were harvested from Australia's hardwood plantation estate.

In the decade to 2017–18, structural change in the forestry sector led to a 54% decline in the harvest of (predominantly hardwood) native forest logs but a 164% increase in the harvest of hardwood plantation logs (mainly pulplogs). Softwood plantations continue to supply most of Australia's sawlogs—79% of Australia's total sawlog harvest in 2017–18 was from softwood plantations.

Logs harvested, Australia, 2007–08, 2012–13, and 2017–18

Source of logs	2007–08 ('000 m³)	2012–13 ('000 m³)	2017–18 ('000 m³)	10-year change (%)
Native forests				
Sawlogs and veneer logs (including cypress pine)	3,176	2,044	2,027	-36.2
Pulplogs and other logs	5,974	1,872	2,220	-62.8
Total	**9,150**	**3,916**	**4,247**	**-53.6**
Hardwood plantations				
Sawlogs and veneer logs	186	113	810	335.2
Pulplogs and other logs	4,084	5,392	10,457	156.0
Total	**4,270**	**5,506**	**11,266**	**163.8**
Softwood plantations				
Sawlogs and veneer logs	9,422	8,135	10,686	13.4
Pulplogs and other logs	5,526	5,316	6,740	22.0
Total	**14,947**	**13,451**	**17,426**	**16.6**
Total log harvest	**28,368**	**22,872**	**32,939**	**16.1**

Note: Totals may not tally because of rounding.
Source: *Australian forest and wood products statistics, September and December quarters 2018*

Hardwood sawnwood production decreased by 35.9% in the decade to 2017–18 and softwood sawnwood production decreased by 8.0%.

Plywood panel production increased by 16.9% over the decade to 2017–18. Data were not available in 2017–18 for other wood-based panels, which include products such as medium-density fibreboard and particleboard.

Paper and paperboard production decreased by 1.6% over the decade to 2017–18. Paper and paperboard includes products such as newsprint, printing and writing paper, household and sanitary paper, and packaging and industrial paper.

Production of wood products, Australia, 2007–08, 2012–13 and 2017–18

Production	2007–08	2012–13	2017–18	10-year change (%)
Sawnwood production ('000 cubic metres)				
Hardwood **a**	1,109	744	711	–35.9
Softwood **b**	4,263	3,849	3,924	–8.0
Total	**5,372**	**4,593**	**4,635**	**–13.7**
Wood-based panel production ('000 cubic metres) c				
Plywood	134	128	156	16.9
Particleboard	957	837	na	na
Medium-density fibreboard	710	460	na	na
Total	**1,800**	**1,425**	**na**	**na**
Paper and paperboard products production ('000 tonnes)				
Newsprint	456	405	318	–30.3
Printing and writing	706	369	456	–35.4
Household and sanitary	183	188	244	33.3
Packaging and industrial	1,933	2,054	2,207	14.2
Total	**3,278**	**3,016**	**3,225**	**–1.6**

a Mainly sawn from native forest eucalypt logs. **b** Includes cypress pine logs. **c** Excludes laminated veneer lumber, veneer and hardboard.
Note: Totals may not tally because of rounding. **na** Not available.
Source: *Australian forest and wood products statistics, September and December quarters 2018*

Wood product consumption and trade

Domestic consumption of hardwood sawnwood declined by 37% between 2007–08 and 2017–18. Imports of hardwood sawnwood also decreased in this decade. Over the decade to 2017–18, the proportion of hardwood sawnwood imports to consumption remained relatively stable, averaging 9%.

Consumption of softwood sawnwood averaged 4.4 million cubic metres per year between 2007–08 and 2017–18. Imports of softwood sawnwood averaged 599,000 cubic metres per year during this period, accounting for 14% of 10-year average domestic consumption.

Overall trends in domestic consumption of panel products are closely linked to housing activity. The proportion of medium-density fibreboard manufactured in Australia that is exported decreased from 43% in 2006–07 to 11% in 2016–17.

Australia's consumption of paper and paperboard decreased by 18.6% between 2007–08 and 2017–18. During this period, the substantial decrease in consumption of newsprint was partially offset by an increase in consumption of household and sanitary paper. Over the decade, total consumption of paper products consistently exceeded total domestic production. The difference was made up by paper and paperboard imports averaging 1.7 million tonnes per year.

The total value of wood and paper product exports in 2017–18 was $3.6 billion, while the total value of imports was $5.6 billion.

Consumption of wood products, Australia, 2007–08, 2012–13 and 2017–18

Consumption	2007–08	2012–13	2017–18	10-year change (%)
Sawnwood consumption ('000 cubic metres)				
Hardwood	1,181	790	741	–37.3
Softwood	4,571	4,179	4,463	–2.4
Total	**5,752**	**4,969**	**5,203**	**–9.5**
Wood-based panel consumption ('000 cubic metres) a				
Plywood	355	370	668	88.1
Particleboard	1,024	907	na	na
Medium-density fibreboard	555	484	na	na
Total	**1,934**	**1,761**	**na**	**na**
Paper and paperboard products consumption ('000 tonnes)				
Newsprint	679	418	174	–74.4
Printing and writing	1,822	1,385	1,200	–34.2
Household and sanitary	227	335	388	70.7
Packaging and industrial	1,606	1,534	1,765	9.8
Total	**4,335**	**3,672**	**3,527**	**–18.6**

a Excludes laminated veneer lumber, veneer and hardboard.
Note: Totals may not tally because of rounding. **na** Not available.
Source: *Australian forest and wood products statistics, September and December quarters 2018*

Wood product exports, Australia, 2007–08, 2012–13, and 2017–18

Wood product	2007–08 ($m)	2012–13 ($m)	2017–18 ($m)	10-year change (%)
Roundwood	105.4	154.7	643.5	510.3
Sawnwood **a**	112.9	86.2	99.0	–12.3
Wood-based panels	112.1	50.8	65.1	–41.9
Paper and paperboard **b**	635.5	711.5	962.6	51.5
Recovered paper	251.7	230.0	247.8	–1.5
Woodchips	1,072.2	611.0	1,328.2	23.9
Other products	182.3	199.8	259.3	42.2
Total wood product exports	**2,472.1**	**2,044.0**	**3,605.5**	**45.8**

a Sawnwood represents a wide range of species and grades.
b Mainly packaging and industrial papers.
Note: Totals may not tally because of rounding.
Source: *Australian forest and wood products statistics, September and December quarters 2018*

Wood product imports, Australia, 2007–08, 2012–13, and 2017–18

Wood product	2007–08 ($m)	2012–13 ($m)	2017–18 ($m)	10-year change (%)
Sawnwood **a**	422.4	316.9	451.4	–6.9
Miscellaneous forest products	675.1	839.9	1,454.2	115.4
Wood-based panels	273.5	311.5	684.2	150.1
Paper and paperboard **b**	2,248.4	2,043.1	2,104.8	–6.4
Paper manufactures	513.3	446.1	653.3	27.3
Pulp	285.2	154.4	260.3	–8.7
Other products	4.9	4.5	7.5	51.1
Total wood product imports	**4,422.9**	**4,116.3**	**5,615.8**	**27.0**

a Sawnwood represents a wide range of species and grades.
b Mainly packaging and industrial papers.
Note: Totals may not tally because of rounding.
Source: *Australian forest and wood products statistics, September and December quarters 2018*

Did you know?

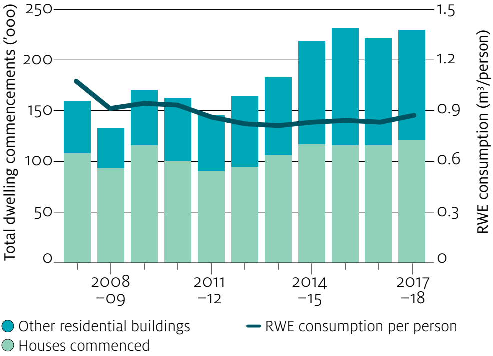
The total volume of Australia's roundwood exports increased from 1.0 million cubic metres in 2007–08 to 4.5 million cubic metres in 2017–18.

Roundwood equivalent consumption and dwelling commencements

Year-on-year consumption of wood products is linked to rises and falls in housing activity because a range of wood products are used in building construction. Between 2007–08 and 2011–12, total dwelling commencements and per-person roundwood equivalent consumption followed similar trends. However, in the period 2011–12 to 2017–18, per-person roundwood equivalent consumption did not increase in line with total dwelling commencements. This is because other residential buildings historically use less timber in their construction than houses, and the commencement of other residential buildings has almost doubled since 2011–12.

Roundwood equivalent consumption per person was 0.87 cubic metres in 2017–18, down from 1.06 cubic metres in 2007–08 largely because of decreased roundwood equivalent consumption of hardwood sawlogs and veneer logs.

Dwelling commencements and roundwood equivalent consumption, Australia, 2007–08 to 2017–18



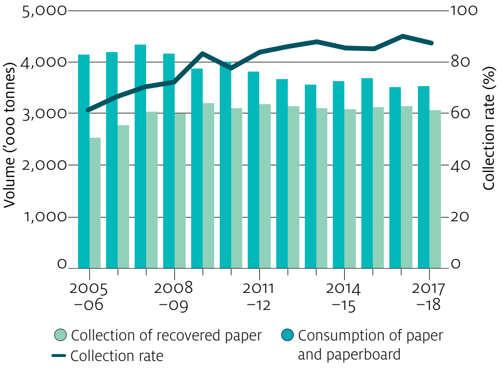
RWE Roundwood equivalent
Source: *Australian forest and wood products statistics, September and December quarters 2018*

Recycling

The collection rate of recovered paper (ratio of the volume of recovered paper to the volume of paper products consumed) increased from 70.1% in 2007–08 to 86.9% in 2017–18. The volume of recovered paper increased from 3.0 million tonnes in 2007–08 to 3.1 million tonnes in 2017–18.

Around half of the recovered paper is used domestically for production of paper and paperboard products; 42% of recovered paper was exported in 2017–18.

Consumption, collection and collection rate of paper products for recycling, Australia, 2005–06 to 2017–18



Source: *Australian forest and wood products statistics, September and December quarters 2018*

Forestry and forest products manufacturing industry and employment

In 2017–18 the annual sales and service income of forest product manufacturing industries was $23.9 billion, representing 6.3% of sales and service income of total manufacturing in Australia. The forestry and forest product manufacturing industries contributed 0.5% to Australia's gross domestic product in 2017–18.

The Australian Bureau of Statistics labour force survey (ABS 2019) estimated that in 2017–18 a total of 76,200 people were employed in the forestry and forest products manufacturing industries.

Estimated employment in the forestry and forest products manufacturing industries, Australia, 2017–18

Sector a	**No. of employees** b
Forestry, logging and support services	11,000
Sawmilling and timber dressing	11,400
Other wood product manufacturing	39,100
Pulp, paper and paperboard	4,300
Converted paper products	6,400
Other pulp, paper and converted paper	4,000
Total	**76,200**

a ANZSIC 2006 categories. **b** Average employment over four quarters.
Note: Australian Bureau of Statistics advises caution using employment statistics at the ANZSIC subdivision and group levels due to estimates that may be subject to sampling variability and standard errors too high for most practical purposes. Totals may not tally because of rounding.
Source: ABS 2019

Future log availability

Future plantation log availability

Based on surveys completed by plantation owners and managers, and assuming business-as-usual conditions over the period to 2059, ABARES estimates that availability of softwood plantation logs will increase slightly, and peak at 18.9 million cubic metres per year by 2035–39.

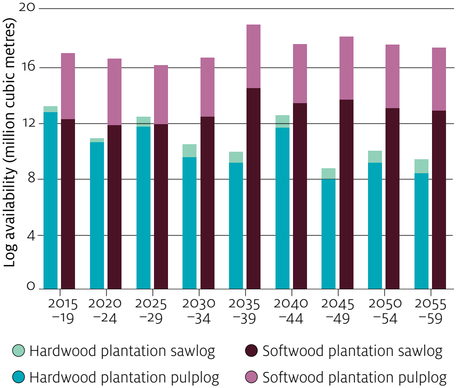
Almost all softwood plantations are managed for sawlog production in Australia. On average, between 2015–19 and 2055–59 a total of 17.2 million cubic metres of logs are projected to be available from softwood plantations each year, three-quarters of which are expected to be sawlogs (including logs suitable for veneer and plywood manufacturing).

New South Wales and Victoria are projected to have the largest volumes of softwood plantation sawlogs available over the period to 2055–59. The availability of softwood sawlogs is expected to increase most in Victoria and Queensland, while softwood plantation sawlog availability is forecast to decline in New South Wales.

Future hardwood plantation log availability is projected to be volatile over the forecast period because of assumptions around the harvesting and replanting of these plantations, and is projected to peak in 2015–19 then decrease to the lowest level in 2045–49. Based on stakeholder discussions, ABARES has assumed that some existing hardwood plantations in some plantation regions will not be replanted after the first rotation because they are not considered commercially viable.

In contrast to softwood plantations, the majority of hardwood plantations in Australia are managed for short-rotation pulplog production. On average, only 7% of projected logs available from hardwood plantations over the period to 2055–59 are expected to be sawlogs. Tasmania is forecast to have the largest volume of hardwood plantation sawlogs available over the period to 2055–59. Hardwood plantation pulplog availability is projected to decline in all states and territories except for New South Wales and the Northern Territory, with the greatest decreases occurring in Victoria and Western Australia.

Future log availability from plantations, Australia, 2015–19 to 2055–59



Source: *Australia's plantation log supply 2015–2059*

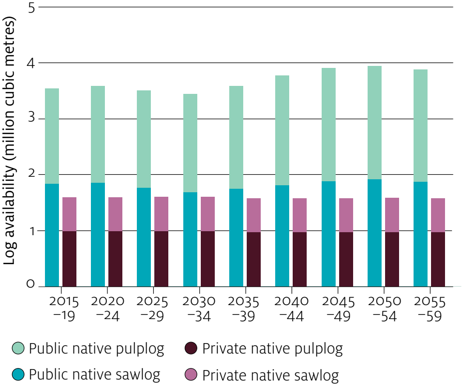
Future native forest log availability

Projections of log availability from public and private native forests are based on published forecasts of log supply to June 2018, supplemented with ABARES estimates of sustainable yield. The projections assume there will be no future decrease in public native forest area available for log production.

Overall native forest log availability is estimated to average 5.3 million cubic metres per year over the period to 2055–59. Around 70% of total native forest log availability is estimated to come from public native forests and around 30% from private native forests. Public native forest log availability is projected to decline to around 3.4 million cubic metres per year in 2030–34 then peak at 3.9 million cubic metres per year in 2050–54, while private native forest log availability is estimated to remain relatively constant over the projection period at around 1.6 million cubic metres per year.

Between 2015–19 and 2055–59, native forest sawlog availability is projected to decline in Tasmania and increase marginally in New South Wales, Queensland, Victoria and Western Australia. The availability of native forest pulplog is forecast to increase in New South Wales, Victoria and Western Australia.

Future log availability from native forest, Australia, 2015–19 to 2055–59

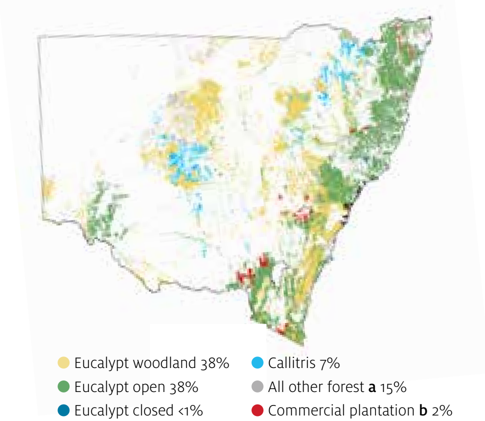


Source: ABARES

State and territory summaries

New South Wales

Forest cover by main category, type and cover class, New South Wales, 2016



a Forest mapped as 'All other forest' comprises: native forest types Acacia, Casuarina, Mangrove, Melaleuca, Rainforest and 'Other native forest'. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in New South Wales. Totals may not tally because of rounding.
Source: National Forest Inventory, ABARES

Forest and land area, New South Wales, 2017–18

Forest category	Area ('000 hectares)	% of state land area	% of national forest category area
Native forest	19,925	24.9	15.1
Commercial plantations	393	0.5	20.2
Other forest	62	0.1	13.1
Total forest	**20,381**	**25.4**	**15.2**

Native forest area, by tenure, New South Wales, 2016

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	4,249	21.3
Multiple-use public forest	1,856	9.3
Nature conservation reserve	5,569	27.9
Other Crown land	755	3.8
Private forest	7,414	37.2
Unresolved tenure	81	0.4
Total native forest	**19,925**	**100**

New South Wales forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, NSW forestry and forest products manufacturing industries employed 16,396 people in 2016 (ABS 2016).

In 2016–17, New South Wales had 88 sawmills and post and pole mills, 7 panel mills and 5 paper mills in operation. The state has the largest number of hardwood sawmills in Australia and the largest processing capacity for hardwood and softwood sawmills and paper mills. The average annual input of hardwood sawmills in New South Wales was 9,121 cubic metres, while the average annual input of softwood sawmills was 185,186 cubic metres.

Volume and value of logs harvested, New South Wales, 2017–18

Log type	Volume of logs harvested ('000 m³)	% of national total volume	Value of logs harvested ($m)	% of national total volume
Hardwood native	977	23.9	129	33.3
Hardwood plantation	254	2.3	22	2.6
Softwood (incl. cypress pine)	4,993	28.4	393	27.6
Total	**6,224**	**18.9**	**544**	**20.4**

Note: Value of logs harvested at mill door prices.

Wood processors, New South Wales, 2016–17

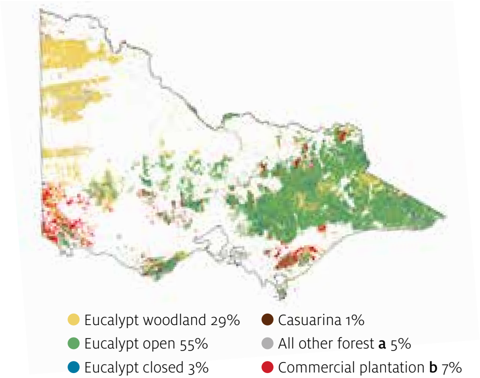
Type of facility	Number of facilities	Total capacity	Unit of capacity
Hardwood	68	823	'000 cubic metres log input
Softwood	14	2,991	'000 cubic metres log input
Cypress pine	4	51	'000 cubic metres log input
Post and pole	2	na	na
Wood-based panels	7	681	'000 cubic metres per year log and residue input
Paper and paperboard	5	1,586	'000 tonnes per year product output
Log and woodchip export	2	na	na

na Not available.
Note: Some data not reported because of confidentiality restrictions.

Did you know?
In 2016–17, New South Wales processed 33% of Australia's softwood sawnwood, 33% of hardwood sawnwood and 31% of cypress sawnwood.

Victoria

Forest cover by main category, type and cover class, Victoria, 2016



a Forest mapped as 'All other forest' comprises: native forest types Acacia, Callitris, Mangrove, Melaleuca, Rainforest and 'Other native forest'. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in Victoria. Totals may not tally because of rounding.
Source: National Forest Inventory, ABARES

Did you know?

Forty-three per cent of all forests in Victoria are in protected-area categories classified by the International Union for Conservation of Nature.

Forest and land area, Victoria, 2017–18

Forest category	Area ('000 hectares)	% of state land area	% of national forest category area
Native forest	7,645	33.6	5.8
Commercial plantations	421	1.8	21.6
Other forest	162	0.7	34.2
Total forest	**8,228**	**36.2**	**6.1**

Native forest area, by tenure, Victoria, 2016

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	0	0
Multiple-use public forest	3,052	39.9
Nature conservation reserve	3,367	44.0
Other Crown land	241	3.2
Private forest	984	12.9
Unresolved tenure	0	0.0
Total native forest	**7,645**	**100**

Victoria forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, Victorian forestry and forest products manufacturing industries employed 15,105 people in 2016 (ABS 2016).

In 2016–17 Victoria had 42 sawmills and post and pole mills, 3 panel mills and 5 paper mills in operation. The average annual input of Victoria's hardwood sawmills was 21,565 cubic metres, the highest of any state, and the average annual capacity of softwood sawmills was 156,886 cubic metres. Victoria also has the largest log and woodchip export capacity in Australia.

Volume and value of logs harvested, Victoria, 2017–18

Log type	Volume of logs harvested ('000 m^3)	% of national total volume	Value of logs harvested ($m)	% of national total volume
Hardwood native	1,211	29.6	103	26.8
Hardwood plantation	3,577	31.8	262	30.8
Softwood	4,262	24.2	341	24.0
Total	**9,050**	**27.5**	**707**	**26.6**

Note: Value of logs harvested at mill door prices.

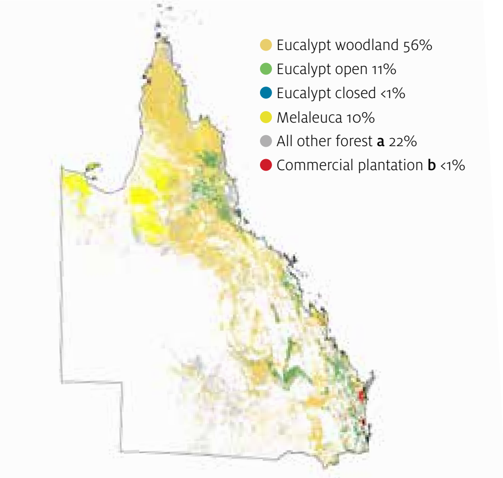
Wood processors, Victoria, 2016–17

Type of facility	Number of facilities	Total capacity	Unit of capacity
Hardwood	25	598	'000 cubic metres log input
Softwood	9	1,581	'000 cubic metres log input
Post and pole	8	118	'000 cubic metres log input
Wood-based panels	3	na	na
Paper and paperboard	5	977	'000 tonnes per year product output
Log and woodchip export	7	6,810	000 cubic metres per year log and residue input

na Not available.
Note: Some data not reported because of confidentiality restrictions.

Queensland

Forest cover by main category, type and cover class, Queensland, 2016



a Forest mapped as 'All other forest' comprises: native forest types Acacia, Callitris, Casuarina, Mangrove, Rainforest and 'Other native forest'. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in Queensland. Totals may not tally because of rounding.
Source: National Forest Inventory, ABARES

Did you know?
Queensland has the largest forest area of all states and territories, with more than twice the forest area of the Northern Territory, which has the second largest forest area.

Forest and land area, Queensland, 2017–18

Forest category	Area ('000 hectares)	% of state land area	% of national forest category area
Native forest	51,580	29.8	39.2
Commercial plantations	230	0.1	11.9
Other forest	21	0.0	4.4
Total forest	**51,832**	**30.0**	**38.7**

Native forest area, by tenure, Queensland, 2016

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	28,135	54.5
Multiple-use public forest	2,881	5.6
Nature conservation reserve	4,378	8.5
Other Crown land	1,308	2.5
Private forest	14,213	27.6
Unresolved tenure	666	1.3
Total native forest	**51,580**	**100**

Queensland forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, Queensland forestry and forest products manufacturing industries employed 8,453 people in 2016 (ABS 2016).

In 2016–17, Queensland had 76 sawmills and post and pole mills, 4 panel mills and 2 paper mills in operation. Queensland has the largest number of cypress pine sawmills in Australia. Queensland hardwood sawmills had an average annual log input of 6,276 cubic metres and softwood sawmills had an average annual log input of 85,870 cubic metres. Wood-based panel processors in Queensland had a total annual input of 353,100 cubic metres of logs or sawmill residues.

Volume and value of logs harvested, Queensland, 2017–18

Log type	Volume of logs harvested ('000 m^3)	% of national total volume	Value of logs harvested ($m)	% of national total volume
Hardwood native	279	6.8	40	10.3
Hardwood plantation	0	0.0	0	0.0
Softwood (incl. cypress pine)	2,874	16.3	258	18.1
Total	**3,153**	**9.6**	**297**	**11.2**

Note: Value of logs harvested at mill door prices.

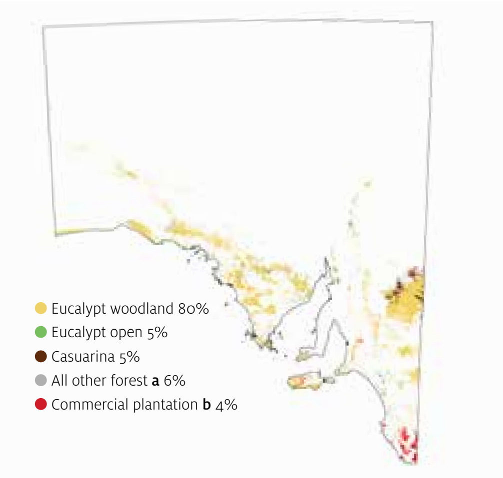
Wood processors, Queensland, 2016–17

Type of facility	No. of facilities	Total capacity	Unit of capacity
Hardwood	44	327	'000 cubic metres log input
Softwood	17	2,040	'000 cubic metres log input
Cypress pine	13	118	'000 cubic metres log input
Post and pole	2	na	na
Wood-based panels	4	487	'000 cubic metres log and residue input
Paper and paperboard	2	na	na
Log and woodchip export	5	954	'000 cubic metres per year log and residue input

na Not available.
Note: Some data not reported because of confidentiality restrictions.

South Australia

Forest cover by main category, type and cover class, South Australia, 2016



a Forest mapped as 'All other forest' comprises: native forest types Acacia, Callitris, Mangrove, Melaleuca, Rainforest and 'Other native forest'. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in South Australia. Totals may not tally because of rounding.
Source: National Forest Inventory, ABARES

Forest and land area, South Australia, 2017–18

Forest category	Area ('000 hectares)	% of state land area	% of national forest category area
Native forest	4,856	4.9	3.7
Commercial plantations	172	0.2	8.9
Other forest	25	0.0	5.3
Total forest	**5,054**	**5.1**	**3.8**

Native forest area, by tenure, South Australia, 2016

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	1,447	29.8
Multiple-use public forest	22	0.5
Nature conservation reserve	1,698	35.0
Other crown land	91	1.9
Private forest	1,580	32.5
Unresolved tenure	20	0.4
Total native forest	**4,856**	**100**

South Australia forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, South Australia's forestry and forest products manufacturing industries employed 5,183 people in 2016 (ABS 2016).

Commercial wood harvesting in native forests in South Australia is not permitted; harvesting is only permitted in plantations.

In 2016–17, South Australia had 15 softwood sawmills and post and pole mills, and 2 panel mills. There are no hardwood sawmills in South Australia. Softwood sawmills in South Australia had an average annual log input of 151,743 cubic metres and accounted for 22.7% of national softwood sawmill output.

Volume and value of logs harvested, South Australia, 2017–18

Log type	Volume of logs harvested ('000 m^3)	% of national total volume	Value of logs harvested ($m)	% of national total volume
Hardwood plantation	1,089	9.7	88	10.3
Softwood	3,059	17.4	246	17.2
Total	**4,148**	**12.6**	**334**	**12.5**

Note: Value of logs harvested at mill door prices.

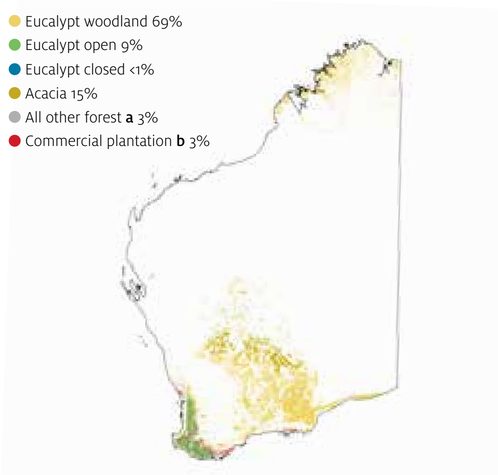
Wood processors, South Australia, 2016–17

Type of facility	Number of facilities	Total capacity	Unit of capacity
Softwood	13	2,059	'000 cubic metres log input
Post and pole	2	na	na
Wood-based panel	2	na	na
Pulp and paper	1	na	na
Log and woodchip export	1	na	na

na Not available.
Note: Some data not reported because of confidentiality restrictions.

Western Australia

Forest cover by main category, type and cover class, Western Australia, 2016



a Forest mapped as 'All other forest' comprises: native forest types Callitris, Casuarina, Mangrove, Melaleuca, Rainforest and 'Other native forest'. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in Western Australia. Totals may not tally because of rounding.
Source: National Forest Inventory, ABARES

Did you know?

Approximately 38% of all eucalypt species in Western Australia are mallee species.

Forest and land area, Western Australia, 2017–18

Forest category	Area ('000 hectares)	% of state land area	% of national forest category area
Native forest	20,450	8.1	15.5
Commercial plantations	362	0.1	18.6
Other forest	148	0.1	31.2
Total forest	**20,961**	**8.3**	**15.6**

Native forest area, by tenure, Western Australia, 2016

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	4,089	20.0
Multiple-use public forest	1,344	6.6
Nature conservation reserve	5,035	24.6
Other Crown land	7,382	36.1
Private forest	2,600	12.7
Unresolved tenure	0	0.0
Total native forest	**20,450**	**100**

Western Australia forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, Western Australia's forestry and forest products manufacturing industries employed 3,746 people in 2016 (ABS 2016).

In 2016–17, Western Australia had 32 sawmills and post and pole mills, and 2 panel mills. Western Australian hardwood sawmills had an average annual log input of 7,348 cubic metres. The state has substantial woodchip export capacity, at more than 4.3 million cubic metres of log and residue input per year.

Volume and value of logs harvested, Western Australia, 2017–18

Log type	Volume of logs harvested ('000 m³)	% of national total volume	Value of logs harvested ($m)	% of national total volume
Hardwood native	366	8.9	27	6.9
Hardwood plantation	3,331	29.6	269	31.6
Softwood	849	4.8	59	4.1
Total	**4,546**	**13.8**	**354**	**13.3**

Note: Value of logs harvested at mill door prices.

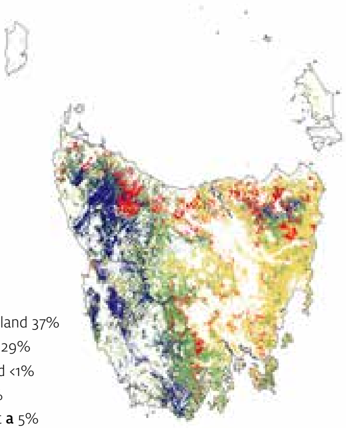
Wood processors, Western Australia, 2016–17

Type of facility	Number of facilities	Total capacity	Unit of capacity
Hardwood	26	223	'000 cubic metres log input
Softwood	2	na	na
Post and pole	4	68	'000 cubic metres log input
Wood-based panel	2	na	na
Log and woodchip export	7	4,326	'000 cubic metres per year log and residue input

na Not available.
Note: Some data not reported because of confidentiality restrictions.

Tasmania

Forest cover by main category, type and cover class, Tasmania, 2016



a Forest mapped as 'All other forest' comprises: native forest types Acacia, Callitris, Casuarina, Mangrove, Melaleuca and 'Other native forest'. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in Tasmania. Totals may not tally because of rounding.
Source: National Forest Inventory, ABARES

Did you know?
Woodland forest is the largest crown cover class in Tasmania's native forests (41%).

Forest and land area, Tasmania, 2017–18

Forest category	Area ('000 hectares)	% of state land area	% of national forest category area
Native forest	3,342	48.9	2.5
Commercial plantations	310	4.5	15.9
Other forest	46	0.7	9.7
Total forest	**3,698**	**54.1**	**2.8**

Native forest area, by tenure, Tasmania, 2016

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	0	0.0
Multiple-use public forest	612	18.3
Nature conservation reserve	1,544	46.2
Other Crown land	380	11.4
Private forest	806	24.1
Unresolved tenure	0	0.0
Total native forest	**3,342**	**100**

Tasmania forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, Tasmanian forestry and forest products manufacturing industries employed 2,440 people in 2016 (ABS 2016).

In 2016–17, Tasmania had 23 sawmills and post and pole mills, and 5 panel mills. The average annual log input of Tasmanian hardwood mills was 11,105 cubic metres. Tasmania has the most log and woodchip export facilities in Australia and the second largest log and woodchip export capacity.

Volume and value of logs harvested, Tasmania, 2017–18

Log type	Volume of logs harvested ('000 m^3)	% of national total volume	Value of logs harvested ($m)	% of national total volume
Hardwood native	1,260	30.8	88	22.8
Hardwood plantation	3,014	26.8	210	24.7
Softwood	1,544	8.8	129	9.0
Total	**5,819**	**17.7**	**427**	**16.0**

Note: Value of logs harvested at mill door prices.

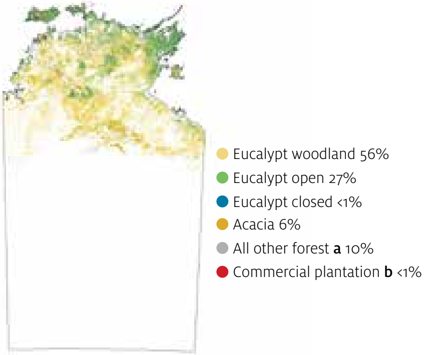
Wood processors, Tasmania, 2016–17

Type of facility	Number of facilities	Total capacity	Unit of capacity
Hardwood	19	278	'000 cubic metres log input
Softwood	3	na	na
Post and pole	1	na	na
Wood-based panels	5	289	'000 cubic metres log and residue input
Paper and paperboard	1	na	na
Log and woodchip export	9	6,331	'000 cubic metres per year log and residue input

na Not available.
Note: Some data not reported because of confidentiality restrictions.

Northern Territory

Forest cover by main category, type and cover class, Northern Territory, 2016



a Forest mapped as 'All other forest' comprises: native forest types Callitris, Casuarina, Mangrove, Melaleuca, Rainforest and 'Other native' forest. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in the Northern Territory. Totals may not tally because of rounding.
Source: National Forest Inventory, ABARES

Forest and land area, Northern Territory, 2017–18

Forest category	Area ('000 hectares)	% of territory land area	% of national forest category area
Native forest	23,686	17.6	18.0
Commercial plantations	47	0.0	2.4
Other forest	4	0.0	0.8
Total forest	**23,737**	**17.6**	**17.7**

Native forest area, by tenure, Northern Territory, 2016

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	9,318	39.3
Multiple-use public forest	0	0.0
Nature conservation reserve	15	0.1
Other Crown land	881	3.7
Private forest	13,435	56.7
Unresolved tenure	38	0.2
Total native forest	**23,686**	**100**

Note: Kakadu National Park and some other national parks in the Northern Territory are Indigenous owned private tenure. The territory does not have multiple-use public forest.

Northern Territory forestry and forest products manufacturing industries

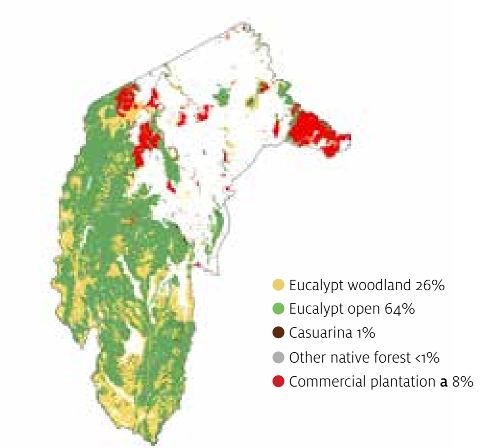
According to the Australian Bureau of Statistics Census, Northern Territory's forestry and forest products manufacturing industries employed 278 people in 2016 (ABS 2016).

The Northern Territory forest industry is largely based on hardwood plantations and on the Indigenous arts and crafts industry, which uses material from native forests.

Did you know?
At 79%, the Northern Territory is the jurisdiction with the largest proportion of its forests in the Indigenous forest estate.

Australian Capital Territory

Forest cover by main category, type and cover class, Australian Capital Territory, 2016



a Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in the Australian Capital Territory. Totals may not tally because of rounding.
Source: National Forest Inventory, ABARES

Forest and land area, Australian Capital Territory, 2017–18

Forest category	Area ('000 hectares)	% of territory land area	% of national forest category area
Native forest	130	55.1	0.1
Commercial plantations	7	3.1	0.4
Other forest	5	2.1	1.1
Total forest	**143**	**60.4**	**0.1**

Native forest area, by tenure, Australian Capital Territory, 2016

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	8	6.2
Multiple-use public forest	5	3.8
Nature conservation reserve	113	86.9
Other Crown land	5	3.8
Private forest	0	0.0
Unresolved tenure	0	0.0
Total native forest	**130**	**100**

Note: The Australian Capital Territory does not have any forest in the Unresolved tenure category. Total may not tally because of rounding.

Did you know?
Eighty-four percent of forests in the Australian Capital Territory are managed primarily for protective functions including protection of soil and water values.

Australian Capital Territory forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, the Australian Capital Territory forestry and forest products manufacturing industries employed 367 people in 2016 (ABS 2016).

In the Australian Capital Territory, commercial wood harvesting is only permitted in plantations. The Australian Capital Territory has 1 softwood sawmill.

Sources

Unless otherwise stated, data in this booklet are drawn from Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) publications:

- **native forests**—*Australia's State of the Forests Report 2018* (MIG & NFISC 2018)
- **plantations**—*Australian plantation statistics 2019 update* (Downham & Gavran May 2019)
- **economics**—*Australian forest and wood products statistics, September and December quarters 2018* (ABARES November 2019)
- **wood processing**—ABARES infrastructure database – (ABARES June 2019)
- **future plantation log availability**—*Australia's plantation log supply 2015–2059* (ABARES 2016).
- **native forest log availability**—ABARES unpublished data

National Forest Inventory and National Plantation Inventory

ABARES, under the auspices of the National Forest Inventory (NFI), collects and publishes information on Australia's forests. The NFI was established in 1988. It provides authoritative and comprehensive information for national and regional monitoring and reporting. The data support decision-making on Australia's forests. The NFI management team in ABARES—working with state, territory and private forest owners and managers—collects and collates data on Australia's forests for publications such as *Australia's State of the Forests Report 2018* (MIG & NFISC 2018).

The National Plantation Inventory (NPI) is an NFI program that has been collecting data and reporting on Australia's forestry plantations since 1993. It supports strategic forest industry planning and decision-making by presenting information on total plantation area, new plantings and ownership. The NPI publishes comprehensive map-based reports every 5 years and updates in other years.

Australian forest and wood products statistics

ABARES compiles and publishes quarterly forest and wood products statistics from a range of sources. Production data are from ABARES and Australian Bureau of Statistics (ABS) surveys and datasets, state forest services and industry organisations. The ABS provides data on imports and exports of wood products.

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MIG & NFISC 2018, *Australia's State of the Forests Report 2018*, Montreal Process Implementation Group for Australia & National Forest Inventory Steering Committee, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, available at doi.org/10.25814/5be1205b3aa33.

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