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Australian forest profiles

Mangrove



The Mangrove forest type occurs in many of Australia's coastal regions, but has a total area of only 0.9 million hectares, or less than 1 per cent of Australia's forest cover. Australian Mangrove forests contain 41 species of mangrove from 19 plant families. More than half of the world's mangrove species are found in Australia.

Mangroves are found in the intertidal zones of tropical, subtropical and protected temperate coastal rivers, estuaries and bays, where they grow in fine sediments deposited by rivers and tides.

Mangrove trees have a characteristic growth form, including aerial structural roots and exposed breathing roots. This helps them cope with regular tidal inundation and a lack of oxygen in the soil.



Mangrove forest, Daintree National Park, Queensland
Claire Howell

Distribution and ownership

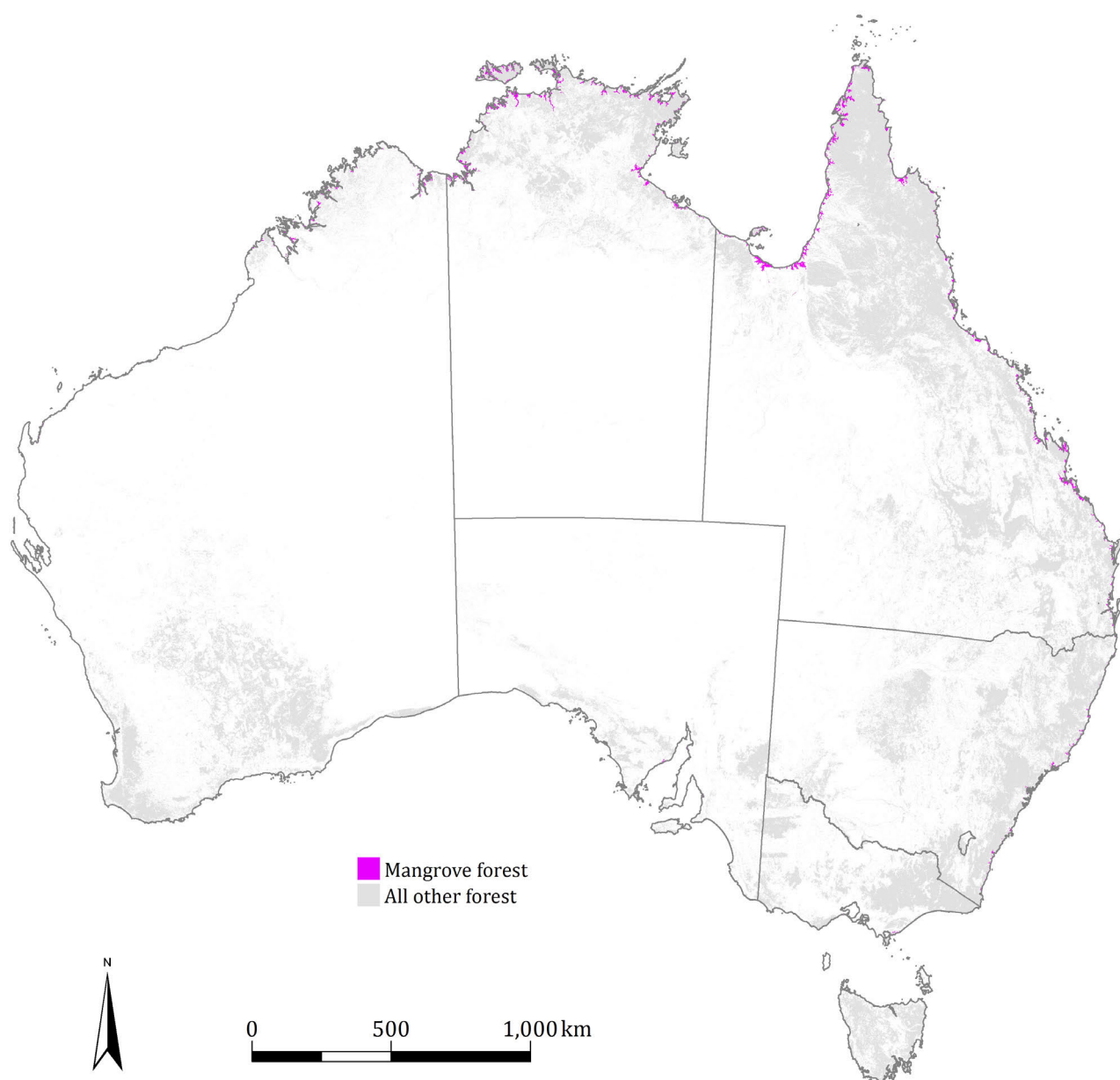
The Mangrove forest type is found in all mainland states and the Northern Territory (Map 1). A total of 0.4 million hectares (48 per cent) are found in Queensland and 0.3 million hectares (37 per cent) are in the Northern Territory.

The most common mangrove is white mangrove (*Avicennia marina*), which is found in mainland coastal areas and comprises three subspecies. Subspecies *A. m. marina* is found in Western Australia from Bunbury in the south to the

Kimberley region in the north. Subspecies *A. m. eucalyptifolia* is found from Wyndham in northern Western Australia to Mackay in Queensland. Subspecies *A. m. australasica* is found from south of Rockhampton in central Queensland to Victoria and South Australia.

A total of 0.3 million hectares (34 per cent) of the Mangrove forest type is on private land and 0.2 million hectares (17 per cent) are on other Crown land (Table 1).

MAP 1 Distribution of Mangrove native forest, 2013



Projection: Albers equal-area with standard parallels 18°S and 36°S.

Source: ABARES (2016). Map compiled by ABARES 2016

[Open a high-resolution version of Map 1 that can be saved as a PNG file](#)

TABLE 1 Ownership of Mangrove native forest, by state and territory, 2013 ('000 hectares)

Tenure	ACT	NSW	NT	Qld	SA	Tas.	Vic.	WA	Australia
Leasehold	0	0	46	100	1	0	0	5	154
Multiple-use public forest	0	0	0	0	0	0	0	0	1
Nature conservation reserve	0	6	5	62	3	0	1	43	120
Other Crown land	0	0	31	69	5	0	0	56	161
Private	0	10	219	87	1	0	0	1	318
Unresolved tenure	0	0	32	122	3	0	0	0	158
Total	0	16	334	441	13	0	2	107	913

Note: Totals may not tally due to rounding. The six forest tenure categories are defined in *Australia's State of the Forests Report 2013*.

Source: ABARES (2016)

[Download Table 1 data as an Excel workbook](#)

Forest Structure

Forty-seven per cent of Mangrove forest (0.4 million hectares) is closed forest and 57 per cent (0.5 million hectares) is low forest (Figure 1).

Native forests are divided into three classes based on crown cover:

woodland forest (20 to 50 per cent crown cover)

open forest (>50 to 80 per cent crown cover)

closed forest (>80 to 100 per cent crown cover)

and three classes based on mature tree height:

low (2 to 10 metres)

medium (>10 to 30 metres)

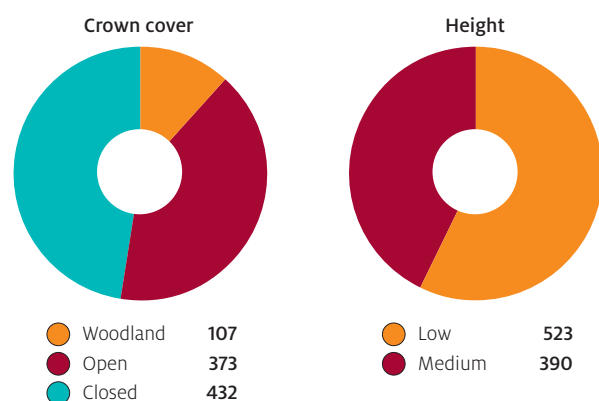
tall (>30 metres).

Importance and uses

Mangroves contribute many environmental benefits to coastal and estuarine ecosystems. Mangrove tree and root structures prevent erosion by stabilising soils and sediment in intertidal zones, and provide buffer zones from severe storms and cyclones.

Mangroves also provide habitat and food for migratory birds, estuarine and coastal fish species, molluscs and crustaceans, and serve as nurseries for commercial industries such as prawn farming.

Mangroves have traditionally been used by Indigenous Australians as sources of food, including mangrove fruit, mud crabs, clams and fish such as barramundi. Mangrove timber has traditionally been used to make canoes, paddles and weapons such as shields, spears and boomerangs.

FIGURE 1 Structure of Mangrove native forest, 2013 ('000 hectares)

Source: ABARES (2016)

[Download Figure 1 data as an Excel workbook](#)

Bibliography

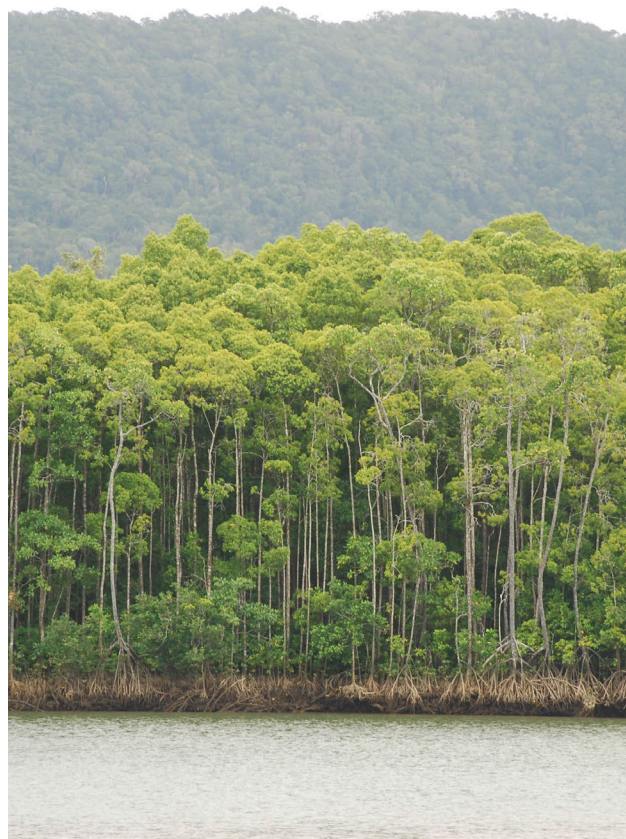
ABARES 2016, *Forests of Australia (2013) v2.0*, Australian Bureau of Agricultural and Resource Economics and Sciences, agriculture.gov.au/abares/forestsaustralia/Pages/Forest-data.aspx.

Boland, D, Brooker, M, Chippendale, G, Hall, N, Hyland, B, Johnston, R, Kleinig, D, McDonald, M & Turner, J 2006, *Forest trees of Australia*, 5th edn, CSIRO Publishing, Melbourne.

Carnahan, JA 1990, *Atlas of Australian resources*, vol. 6, *Vegetation*, Australian Government Publishing Service, Canberra.

Mangrove Watch 2013, *Welcome to Mangrove Watch*, Mangrove Watch Ltd, mangrovetwatch.org.au.

Montreal Process Implementation Group for Australia & National Forest Inventory Steering Committee 2013, *Australia's State of the Forests Report 2013*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, agriculture.gov.au/abares/forestsaustralia/Pages/SOFR/sofr-2013.aspx.



Mangrove forest, Cairns, Queensland
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This is one in a series of profiles on Australia's major forest types. It has been compiled using information from the Australia's State of the Forests Report series and subsequent updates. The latest report, Australia's State of the Forests Report 2013, and the profiles, are available at agriculture.gov.au/abares/forestsaustralia.

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