

## Biodiversity reporting and the Montréal Process in Australia

Forestry management in Harmony with Biodiversity Conservation in Temperate and Boreal Forests and its Monitoring International Symposium, Tokyo

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### Forest reporting in Australia

#### **National level**

- Australia's State of the Forests Report
- Montréal Process country report

#### **International reporting processes**



Montréal Process Working Group for sustainable forest management



FAO five-yearly global Forest Resources Assessment



United Nations Sustainable

Development Goals & Global Forest Goals







## Australia's State of the Forests Report

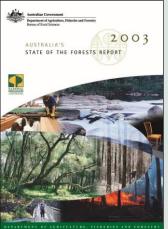
#### **Australia's State of the Forests Report: Synthesis 2023**

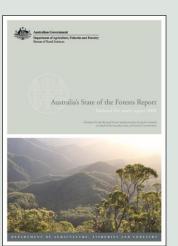
continuing Australia's commitment to five-yearly reporting on forests

#### Australia's land and forest areas

- 769 million hectares total land
- 134 million hectares total forest (17% of total land area)
- 132 million hectares native forest
- 49 million hectares native forest managed for protection of biodiversity (37% of native forest)

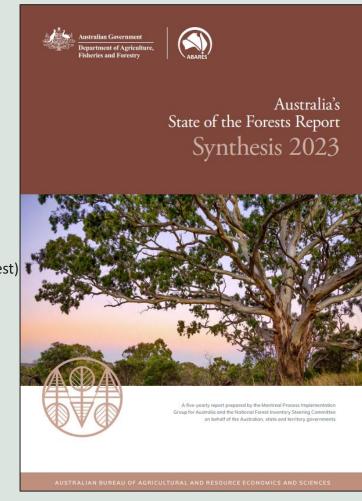












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## Forest biodiversity reporting for Australia

#### Australia's Criterion 1: Conservation of Biological Diversity

1.1	Ecosystem diversity
1.1a	Area of forest by forest type and tenure
1.1b	Area of forest by growth stage
1.1c	Area of forest in protected area categories
1.1d	Fragmentation of forest cover
1.2	Species diversity
1.2a	Forest dwelling species for which ecological information is available
1.2b	The status of forest dwelling species at risk of not maintaining viable breeding populations, as determined by legislation or scientific assessment
1.2c	Representative species from a range of habitats monitored at scales relevant to regional forest management
1.3	Genetic diversity
<b>1.3</b> a	Forest associated species at risk from isolation and the loss of genetic variation, and conservation efforts for those species
1.3b	Native forest and plantations of indigenous timber species which have genetic resource conservation mechanisms in place

# Australian forest types

Considerable diversity: Eucalyptus – 900 species

Acacia – 1500 species

#### Native forest type

Acacia

Callitris

Casuarina

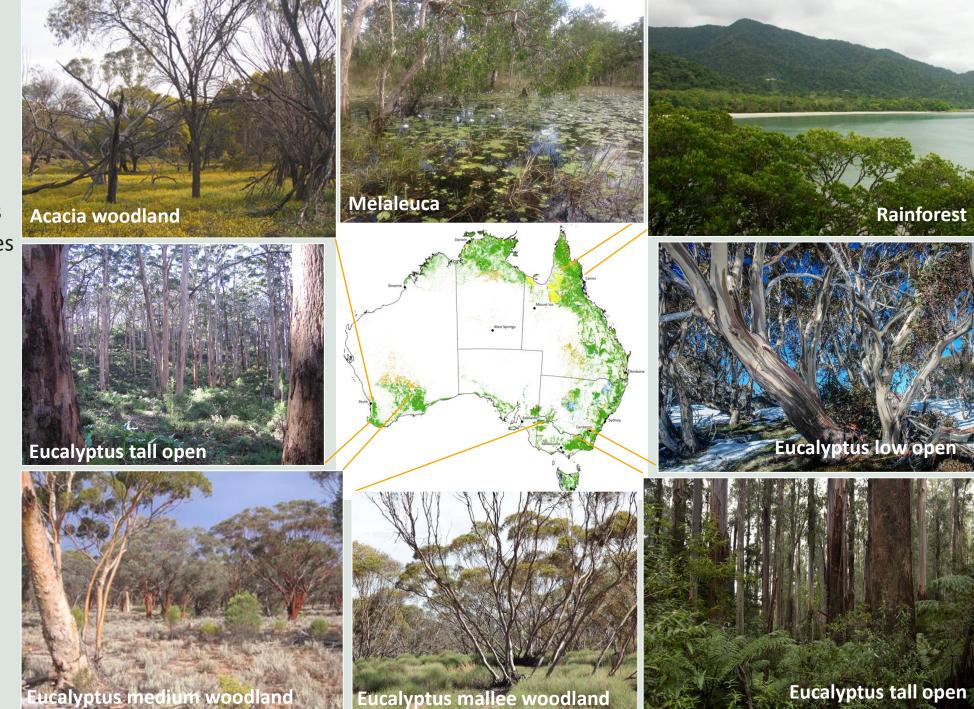
Eucalypt

Mangrove

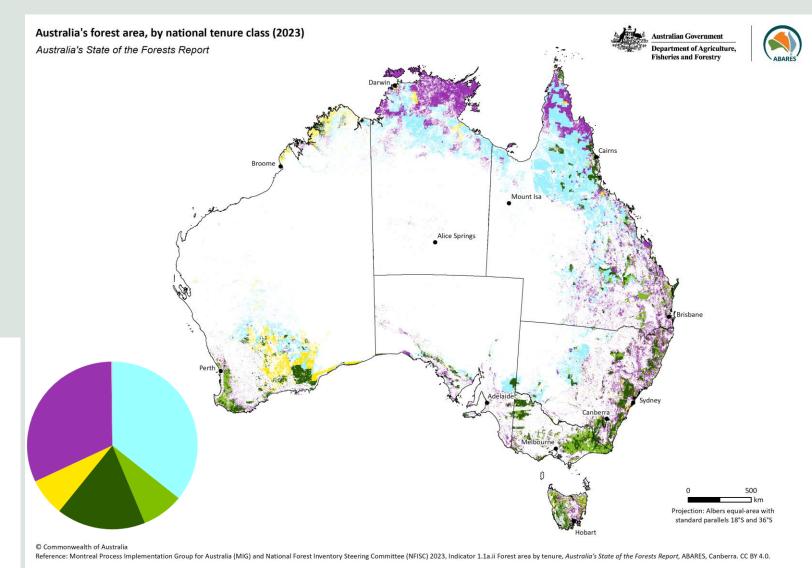
Melaleuca

Rainforest

Other native forest

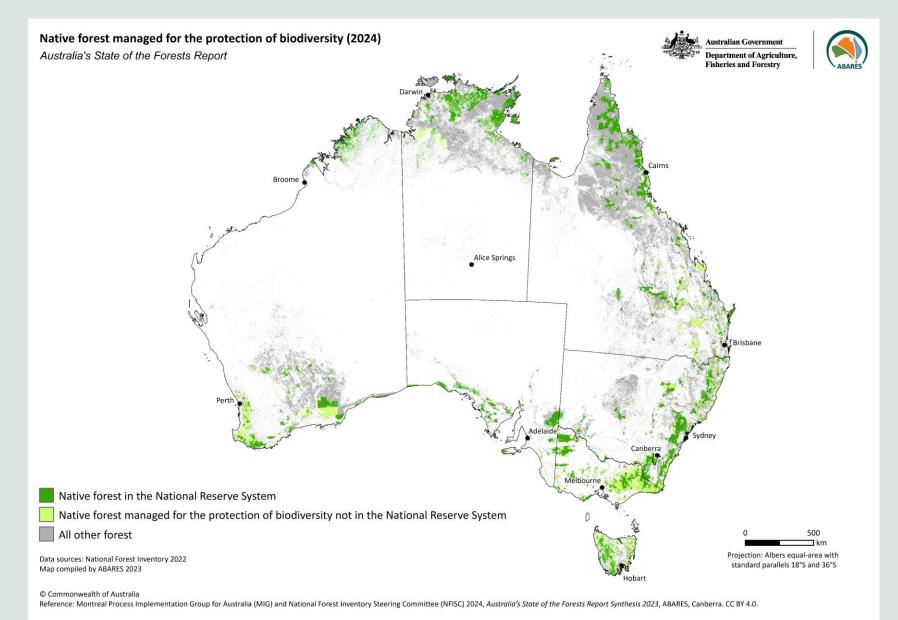


## Forest ownership and management (MP Indictor 1.1.a)

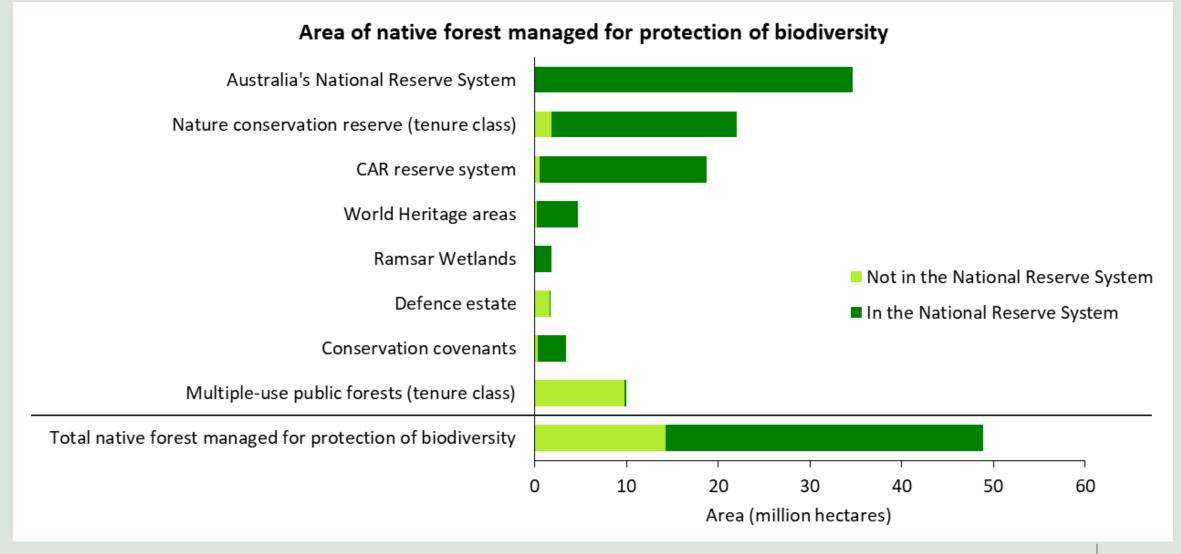




#### Protected areas (MP Indicator 1.1.b)



#### Protected areas (MP Indicator 1.1.b)



#### Forest-dwelling species (MP Indicator 1.2.a)

Forest-dwelling species use forest habitats for at least part of their life cycle

• Data from a single data source:

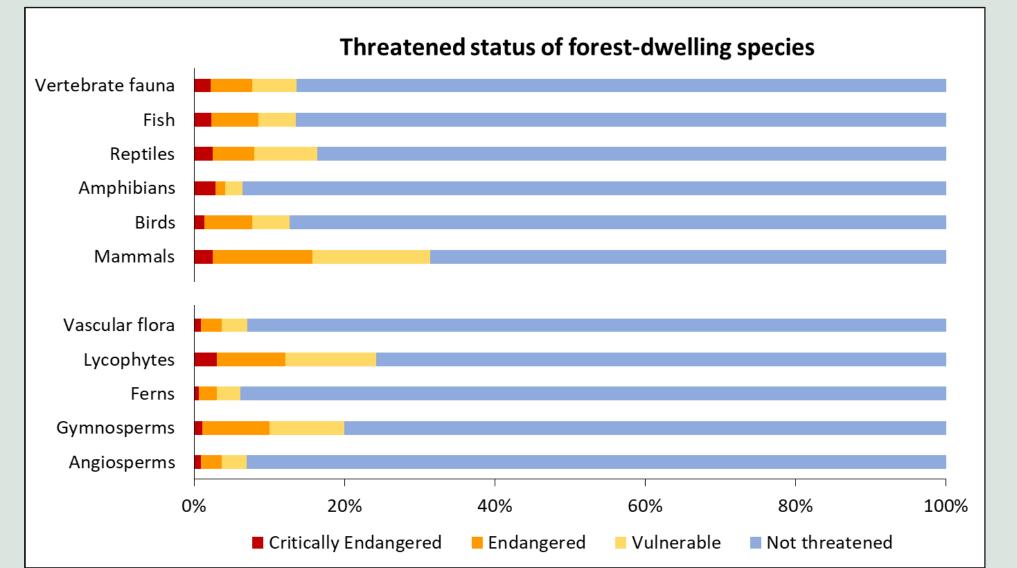
Atlas of Living Australia

- Across Australia
  - 1,788 vertebrate fauna species
  - 13,788 vascular flora species



## Forest-dwelling species (MP Indicators 1.2.a, 1.2.b)







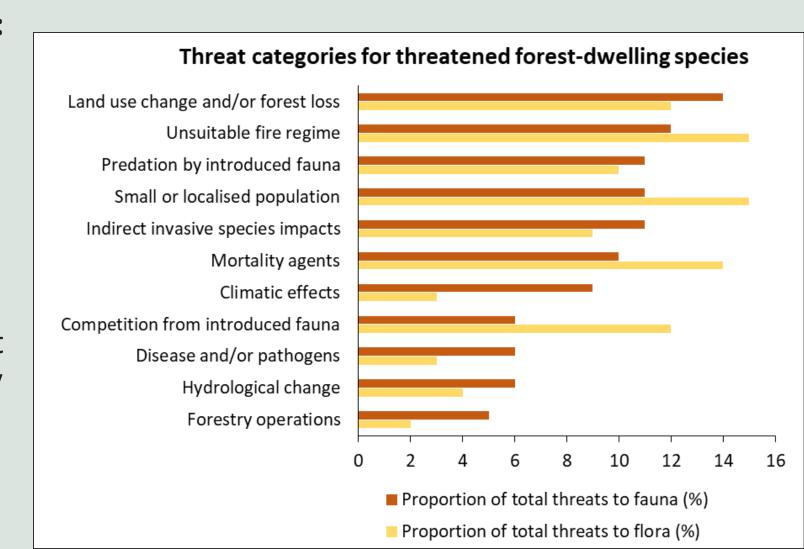


## Forest-dwelling species (MP Indicator 1.2.b)

#### Most common threat categories:

- land use change and/or forest loss
- unsuitable fire regimes
- predation and competition by introduced fauna and flora
- small or localised population

'Forestry operations' is the least commonly cited threat category for both fauna and flora



#### Genetic-related threats (MP Indicator 1.3.a)

- 67% of threatened forest-dwelling species are at risk from genetic-related threats
- The most common genetic-related threats are
  - small populations
  - fecundity issues
  - fragmented populations

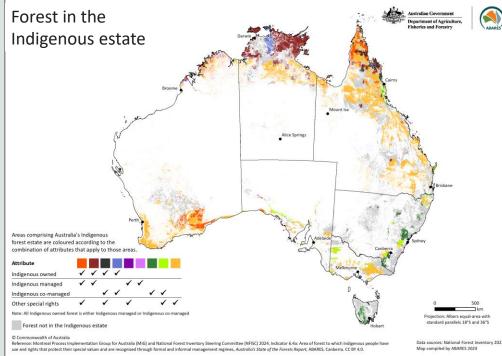
	Proportion of threatened taxa with genetic related threats (%)
Vertebrate fauna	46
Mammals	45
Birds	42
Reptiles	39
Amphibians	51
Fish	60
Vascular flora	72
Angiosperms	73
Gymnosperms	83
Ferns	44
Lycophytes	25
Total	67

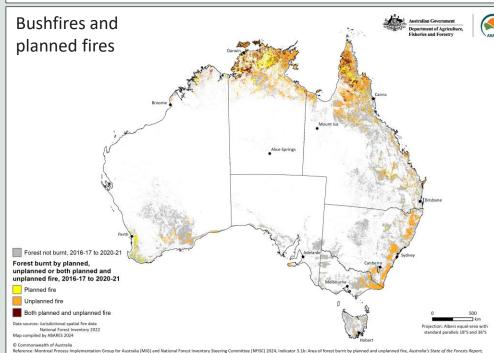
## Forest genetic resources (MP Indicator 1.3.c)

Tree breeding and improvement	<ul> <li>Active programs for more than 30 native wood- or oil-producing species</li> <li>Seed collections for 7 plantation genera</li> </ul>
In situ conservation	<ul> <li>Primary mechanism for conservation of genetic resources in Australia</li> <li>37% of Australia's native forests are managed for protection of biodiversity</li> <li>All 115 Australian native species and hybrids have populations conserved in situ</li> </ul>
Ex situ conservation	<ul> <li>127 of the 129 of the FAO listed forest genetic resources for Australia are conserved in Australia's seed banks</li> </ul>

# Biodiversity links in other Criteria

- Criterion 3
  - Pests and weeds
  - Fire
- Criterion 4
  - Soil and water protection and management
- Criterion 6
  - Indigenous ownership and management
- Criterion 7
  - Legislation
  - Management plans





#### Successes and challenges

- \* Strong, long-term relationships with Montreal Process countries
- <sup>†</sup> Clear national reporting requirements underpinned by the C&I framework
- <sup>†</sup> Thorough methods for determining forest cover, tenure and protected areas, and forest-dwelling flora and fauna species
- Poor information on growth stage and successional stages of native forests
- Forest height data are inconsistent
- Knowledge of management and species is limited for privately managed forests
- Genetic resource data focuses on wood production tree species

## Thank you

www.agriculture.gov.au/abares/forestsaustralia

www.agriculture.gov.au/abares/forestsaustralia/sofr

www.agriculture.gov.au/abares/forestsaustralia/framework/indicator-alignment





