**Attribute lookup tables (LUTs) for the *Forests of Australia (2023)* dataset**

**Dataset attributes (Value Attribute Table or VAT)**

|  |  |  |
| --- | --- | --- |
| **Field** | **Field Type** | **Description** |
| VALUE | Numeric | Identifier of every unique combination of the following attributes: STATE, FOR\_SOURCE, FOR\_CODE, FOR\_TYPE, FOR\_CAT, HEIGHT and COVER. |
| COUNT | Numeric | Number of cells that belong to a particular VALUE. For this particular dataset, in which cell resolution is 100 by 100 metres. The COUNT value is equivalent to area in hectares. |
| FOR\_CATEGORY | Text | NFI forest category description. Valid values are: Non-forest; Native forest; Commercial plantation and Other forest. |
| FOR\_TYPE | Text | NFI forest type name – broad name defined by dominant species and formation or structure. |
| FOR\_CODE | Numeric | Code linking the NFI forest type name (FOR\_TYPE) to a COVER class and HEIGHT class. Each unique combination of the three attributes gives a forest formation value. The FOR\_CODE.LUT below documents each code. |
| COVER\_CODE | Numeric | Code linking an NFI forest type to a crown cover class. The COVER.LUT table below describes each code and value. |
| HT\_CODE | Numeric | Code linking an NFI forest type to a height category – see HEIGHT.LUT table below describes each code and value. |
| STATE | Text | State or territory in which the cell occurs. |
| FOREST | Numeric | Binary field where: Value of 0 indicates **non-forest** and Value 1 indicates **forest**. |
| FOR\_SOURCE | Text | Information about the source of the data for decision on:   * whether to classify as forest or non-forest, * NFI forest type * whether land use is appropriate for forest allocation   See table FOR\_SOURCE.LUT below for explanation of values available or used in the dataset. |

**FOR\_CODE.LUT** (Forest Code lookup-table)

| **Forest code (FOR\_CODE)** | **NFI Forest type**  **(FOR\_TYPE)** | **NFI Forest category**  **(FOR\_CAT)** | **Forest Formation** |
| --- | --- | --- | --- |
| 0 | Non forest | Non forest | Non forest |
| 1 | Acacia | Native forest | Acacia Low Woodland |
| 2 | Acacia | Native forest | Acacia Medium Woodland |
| 3 | Acacia | Native forest | Acacia Tall Woodland |
| 4 | Acacia | Native forest | Acacia Low Open |
| 5 | Acacia | Native forest | Acacia Medium Open |
| 6 | Acacia | Native forest | Acacia Tall Open |
| 7 | Acacia | Native forest | Acacia Low Closed |
| 8 | Acacia | Native forest | Acacia Medium Closed |
| 9 | Acacia | Native forest | Acacia Tall Closed |
| 10 | Other native forest | Native forest | Banksia Low Woodland |
| 11 | Other native forest | Native forest | Banksia Medium Woodland |
| 12 | Other native forest | Native forest | Banksia Low Open |
| 13 | Other native forest | Native forest | Banksia Medium Open |
| 14 | Other native forest | Native forest | Banksia Low Closed |
| 15 | Other native forest | Native forest | Banksia Medium Closed |
| 16 | Callitris | Native forest | Callitris Low Woodland |
| 17 | Callitris | Native forest | Callitris Medium Woodland |
| 18 | Callitris | Native forest | Callitris Tall Woodland |
| 19 | Callitris | Native forest | Callitris Low Open |
| 20 | Callitris | Native forest | Callitris Medium Open |
| 21 | Callitris | Native forest | Callitris Tall Open |
| 22 | Callitris | Native forest | Callitris Low Closed |
| 23 | Callitris | Native forest | Callitris Medium Closed |
| 24 | Callitris | Native forest | Callitris Tall Closed |
| 25 | Casuarina | Native forest | Casuarina Low Woodland |
| 26 | Casuarina | Native forest | Casuarina Low Open |
| 27 | Casuarina | Native forest | Casuarina Low Closed |
| 28 | Casuarina | Native forest | Casuarina Medium Woodland |
| 29 | Casuarina | Native forest | Casuarina Medium Open |
| 30 | Casuarina | Native forest | Casuarina Medium Closed |
| 31 | Casuarina | Native forest | Casuarina Tall Woodland |
| 32 | Casuarina | Native forest | Casuarina Tall Open |
| 33 | Casuarina | Native forest | Casuarina Tall Closed |
| 34 | Eucalypt Mallee Woodland | Native forest | Eucalypt Mallee Low Woodland |
| 35 | Eucalypt Mallee Woodland | Native forest | Eucalypt Mallee Medium Woodland |
| 36 | Eucalypt Mallee Woodland | Native forest | Eucalypt Mallee Tall Woodland |
| 37 | Eucalypt Mallee Open | Native forest | Eucalypt Mallee Low Open |
| 38 | Eucalypt Mallee Open | Native forest | Eucalypt Mallee Medium Open |
| 39 | Eucalypt Mallee Open | Native forest | Eucalypt Mallee Tall Open |
| 40 | Eucalypt Low Woodland | Native forest | Eucalypt Low Woodland |
| 41 | Eucalypt Medium Woodland | Native forest | Eucalypt Medium Woodland |
| 42 | Eucalypt Tall Woodland | Native forest | Eucalypt Tall Woodland |
| 43 | Eucalypt Low Open | Native forest | Eucalypt Low Open |
| 44 | Eucalypt Medium Open | Native forest | Eucalypt Medium Open |
| 45 | Eucalypt Tall Open | Native forest | Eucalypt Tall Open |
| 46 | Eucalypt Low Closed | Native forest | Eucalypt Low Closed |
| 47 | Eucalypt Medium Closed | Native forest | Eucalypt Medium Closed |
| 48 | Eucalypt Tall Closed | Native forest | Eucalypt Tall Closed |
| 49 | Other native forest | Native forest | Leptospermum Low Woodland |
| 50 | Other native forest | Native forest | Leptospermum Medium Woodland |
| 51 | Other native forest | Native forest | Leptospermum Tall Woodland |
| 52 | Other native forest | Native forest | Leptospermum Low Open |
| 53 | Other native forest | Native forest | Leptospermum Medium Open |
| 54 | Other native forest | Native forest | Leptospermum Tall Open |
| 55 | Other native forest | Native forest | Leptospermum Low Closed |
| 56 | Other native forest | Native forest | Leptospermum Medium Closed |
| 57 | Other native forest | Native forest | Leptospermum Tall Closed |
| 58 | Mangrove | Native forest | Mangrove Low Woodland |
| 59 | Mangrove | Native forest | Mangrove Low Open |
| 60 | Mangrove | Native forest | Mangrove Low Closed |
| 61 | Mangrove | Native forest | Mangrove Medium Woodland |
| 62 | Mangrove | Native forest | Mangrove Medium Open |
| 63 | Mangrove | Native forest | Mangrove Medium Closed |
| 64 | Melaleuca | Native forest | Melaleuca Low Woodland |
| 65 | Melaleuca | Native forest | Melaleuca Low Open |
| 66 | Melaleuca | Native forest | Melaleuca Low Closed |
| 67 | Melaleuca | Native forest | Melaleuca Medium Woodland |
| 68 | Melaleuca | Native forest | Melaleuca Medium Open |
| 69 | Melaleuca | Native forest | Melaleuca Medium Closed |
| 70 | Melaleuca | Native forest | Melaleuca Tall Woodland |
| 71 | Melaleuca | Native forest | Melaleuca Tall Open |
| 72 | Melaleuca | Native forest | Melaleuca Tall Closed |
| 73 | Other native forest | Native forest | Mixed Low Woodland |
| 74 | Other native forest | Native forest | Mixed Low Open |
| 75 | Other native forest | Native forest | Mixed Low Closed |
| 76 | Other native forest | Native forest | Mixed Medium Woodland |
| 77 | Other native forest | Native forest | Mixed Medium Open |
| 78 | Other native forest | Native forest | Mixed Medium Closed |
| 79 | Other native forest | Native forest | Mixed Tall Woodland |
| 80 | Other native forest | Native forest | Mixed Tall Open |
| 81 | Other native forest | Native forest | Mixed Tall Closed |
| 82 | Other native forest | Native forest | Other Low Woodland |
| 83 | Other native forest | Native forest | Other Low Open |
| 84 | Other native forest | Native forest | Other Low Closed |
| 85 | Other native forest | Native forest | Other Medium Woodland |
| 86 | Other native forest | Native forest | Other Medium Open |
| 87 | Other native forest | Native forest | Other Medium Closed |
| 88 | Other native forest | Native forest | Other Tall Woodland |
| 89 | Other native forest | Native forest | Other Tall Open |
| 90 | Other native forest | Native forest | Other Tall Closed |
| 91 | Hardwood plantation | Commercial plantation | Plantation Hardwood |
| 92 | Softwood plantation | Commercial plantation | Plantation Softwood |
| 93 | Mixed species plantation | Commercial plantation | Plantation Mixed |
| 94 | Unknown species plantation | Commercial plantation | Plantation Unknown |
| 95 | Rainforest | Native forest | Rainforest Low Open |
| 96 | Rainforest | Native forest | Rainforest Low Closed |
| 97 | Rainforest | Native forest | Rainforest Medium Open |
| 98 | Rainforest | Native forest | Rainforest Medium Closed |
| 99 | Rainforest | Native forest | Rainforest Tall Open |
| 100 | Rainforest | Native forest | Rainforest Tall Closed |
| 101 | Other native forest | Native forest | Unknown native forest |
| 102 | Other forest[[1]](#footnote-1) | Other forest | Other forest1 |

**FOR\_SOURCE.LUT** (Forest Type Source lookup table)

| **FOR\_SOURCE** | **Description** |
| --- | --- |
| BLANK | Non-forest |
| CLUM | Areas not suitable to be mapped as forest owing to their land use type as determined from the Catchment scale land use of Australia (CLUM) dataset (2020). Examples of such land use areas include: cropping, horticulture, irrigation, residential, industrial and utilities. |
| Aus\_For18 | Areas determined by the Multiple Lines of Evidence method to be forest and the Forests of Australia (2018) dataset was used to allocate NFI forest types. |
| NT\_CLUM | Areas of sandalwood in Northern Territory as determined from the Land Use Mapping Project of the Northern Territory, 2016 - 2022 (LUMP). |
| Global Mangroves | Areas determined by the Multiple Lines of Evidence method to be forest and forest type was determined from the Global Mangrove Watch (2018) dataset. |
| NPI spatial | Commercial plantation forest areas identified by the National Plantation Inventory (2021) spatial dataset. |
| NVIS 6.0 | Areas determined by the Multiple Lines of Evidence method to be forest and the National Vegetation Information System 6.0 dataset (Level 5, Level 6, MVG and MVS attributes) was used to allocate NFI forest types. |
| Tas Forest Comms | Areas determined by the Multiple Lines of Evidence method to be forest and the Tasmania Forest Communities with NVIS Groups 2020 dataset was used to allocated NFI forest types. |

**HEIGHT.LUT** (Forest height lookup table)

|  |  |  |
| --- | --- | --- |
| **HEIGHT code** | **Forest height class (metres)** | **Description** |
| 1 | 2–10 | Low |
| 2 | >10–30 | Medium |
| 3 | >30 | Tall |
| 4 | n/a | Plantation |
| 5 | ≥ 2 | Unknown |
| 6 |  | Non Forest |

n/a, not applicable

**COVER.LUT** (Forest crown cover lookup table)

|  |  |  |
| --- | --- | --- |
| **COVER code** | **Forest crown cover** | **Description** |
| 1 | 20–50% | Woodland |
| 2 | >50–80% | Open |
| 3 | >80% | Closed |
| 4 | n/a | Plantation |
| 5 | ≥20% | Unknown |
| 6 | <20% | Non Forest |

n/a, not applicable

**Further Reading**

ABARES 2021, *Catchment scale land use of Australia – Update December 2020*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, February, CC BY 4.0, DOI: [10.25814/aqjw-rq15](https://doi.org/10.25814/aqjw-rq15)

Mutendeudzi M, Read S, Howell C, Davey S & Clancy T 2013b). *A ‘Multiple Lines of Evidence’ approach to Australia’s forest cover estimate.* In: Managing our Forests into the 21stCentury, Proceedings of the Institute of Foresters of AustraliaConference, Canberra, 7–11 April 2013, Institute of Foresters of Australia, Canberra

NVIS Technical Working Group (2017) Australian Vegetation Attribute Manual: National Vegetation Information System, Version 7.0. Department of the Environment and Energy, Canberra. Prep by Bolton, M.P., deLacey, C. & Bossard, K.B. (Eds)

Bunting P, Rosenqvist A, Lucas R, Rebelo L-M, Hilarides L, Thomas N, Hardy A, Itoh T, Shimada M & Finlayson CM 2018, The Global Mangrove Watch – a New 2010 Global Baseline of Mangrove Extent. *Remote Sensing* 10(10): 1669. [doi.org/10.3390/rs10101669](https://doi.org/10.3390/rs10101669)

1. May include planted forests not deemed commercially viable, sandalwood plantations and environmental plantings. [↑](#footnote-ref-1)