



1st February 2011

Tasmanian Forest Group Dataset Version: June 2010 Public land; Dec 2009 Private land

This document accompanies digital data representing Forest Group thematic mapping, reflecting the estimated extent of forest coverage across Tasmania at the above dates.

The digital data comprises two elements:

- GIS thematic data which maps the extent of seven broad groups (categories) of forest, and
- Metadata in ANZLIC format describing the technical specifications of the GIS dataset.

The Forest Group data has been compiled and updated jointly by Forestry Tasmania and Private Forests Tasmania, based on source information owned by, or provided to, those organisations.

You are hereby authorised by Forestry Tasmania and Private Forests Tasmania to access and use the Forest Group dataset on the following basis:

- Any internal or external reference to, or use or access of, the Forest Group data by you or your organisation must acknowledge the dataset by name as "Tasmanian Forest Group Dataset known as ForGroup0910", and must acknowledge Forestry Tasmania and Private Forests Tasmania as its producers.
- 2. The GIS dataset must be deployed and stored in such a way that any party who accesses or uses it is made aware of, and has ready access to, the associated metadata.
- 3. Copies of all or part of the GIS dataset may be made and transferred to other parties, but must be accompanied by copies of the metadata and this letter.

Martin Stone
Forestry Tasmania

Phil Donnelly
Private Forests Tasmania

FOREST GROUP

| Dataset | | | | |
|---------------------|---|---|--|--|
| Title | FORESTGROUP | | | |
| ANZLIC Unique ID | | | | |
| Dataset | Custodian | Forestry Tasmania and Private Forests Tasmania | | |
| Origin | Jurisdiction | Tasmania | | |
| Description | | | | |
| Abstract | The dataset is a digital polygon coverage of Tasmania, (captured at 1:25 000 scale), detailing seven broad categories (groups) of forest vegetation, which have been aggregated from photo-interpreted forest types (PI-types) derived from varying scales of colour aerial photography. Photo-interpreted forest types (PI-types) are coded descriptions of forest vegetation. They classify forest into broad species groups as well as descriptions of stand structure. Full detail of PI-typing is described in Stone(1998). The currency of the FORESTGROUP data varies by tenure. Data for public land, (particularly State forest), is current as at June 2010 with regard to the latest landclearing, regeneration, selective logging, and planting information. The information for other native forest is current to the date of the photography from which it was interpreted; the state is covered by a 20 year remapping cycle. For private land, adjustments for land clearing, regeneration, logging and planting are as advised by major forestry companies to Private Forests Tasmania at various times to December 2009; recent changes which are not forestry-related or not associated with the activities of major companies may not be reflected in the data. | | | |
| Search Word(s) | FORESTS, FORESTS Classification, FORESTS Inventory, FOREST GROUP, FORESTS Mapping, FORESTS Natural Mapping, FORESTS Plantation Mapping, PHOTOGRAPHY AND IMAGERY, PHOTOGRAPHY AND IMAGERY Aerial, VEGETATION Structural. | | | |
| Geographic | Place | Tasmania | | |

| Extent | Bounding | N 5614584, S 3912066 | | |
|--------------------------------------|---|----------------------|--|--|
| | | E 627113, W 227111 | | |
| Data Currency | | | | |
| Begin Date | 1983 | | | |
| End Date | 2010-06-30 | | | |
| Dataset Status | | | | |
| Progress | Complete | | | |
| Maintenance & Update Frequency | Base remapping program covers Tasmania on a 20 year cycle. Adjustments for operations on public land are made annually by Forestry Tasmania. Adjustments for operations on private land are annual, as advised by major forestry companies to Private Forests Tasmania and also comprise the annual sum of PFT's information, resulting from internal update procedures, on private land that is not managed by any commercial company. | | | |
| Access | | | | |
| | Format | | ARC/INFO Coverage or ESRI shapefile | |
| Stored Data Format | Representa | tion | Vector | |
| | Software V | ersion | Arc/Info Revision 9.3 | |
| | Further De | etails | Stored as a single spatial data layer. | |
| Available Format Type | As above. | | | |
| Access Constraint | Publicly available, (conditional on the acknowledgement of custodians). | | | |
| Data Quality | | | | |

- 1. Colour aerial photography of the whole state of Tasmania is taken on a progressive regional cycle every 20 years from which new PI-Type is derived. Generally photography is captured at a scale of 1:20 000, but areas of National Park in Western Tasmania are captured at 1:42 000.
- 2. Forest type boundaries are marked onto the photos, based on stereoscopic interpretation, by Forestry Tasmania's Resources Branch. These forest types are then coded with Forestry Tasmania's standard classifications indicating type of forest, height, and density. See Stone, 1998.

Lineage

- 3. Using PHOTOGIS software, the boundaries are digitised onto the associated TASMAP 1:25 000 mapsheet base, and coded.
- 4. The PI-Type codes are verified using the AML program PIDL which in turn calculates FORGROUP, based on aggregation rules.
- 5. Updates are conducted as information captured by aerial photos and GPS is received from district offices and forestry companies.
- 6. On Private Land updates are made based on information supplied by forestry companies, field information collected from regional Private Forest Tasmania offices and digitising by means of Satellite imagery.

Positional Accuracy

The estimated positional accuracy of PI-type boundaries varies according to the method of data capture and/or scale of the data source, as indicated below:

DATA CAPTURE POSITIONAL ACCURACY

1 : 20000 data capture +- 10 metres 1 : 42 000 data capture +- 21metres

GPS measurement with mapping standard 12 channel receiver, eg +-5 metres

ProXR

The forest type classification is based on forest management and inventory considerations rather than floristic communities. As such PI-types are primarily structural in their description of vegetation, though they have a limited floristic view of the canopy vegetation, i.e. eucalypts are distinguished from myrtle, rainforest trees, acacias, scrub species, and groundcover groups.

By its nature, PI-typed data is primarily remote-sensed i.e. only what can be determined from photographs or satellite imagery can be coded, (though ground-checking is a standard procedure for quality control). Some types are, however, derived from ground observation, particularly those representing regeneration, clearing and planting.

Attribute Accuracy

Codes within each forest type are validated by using the PI-type Decoder Library Program (PIDL), which also calculates the appropriate FORGROUP code.

Attribute accuracy is checked visually at the time of data entry. The minimum patch size is 3 hectares with all smaller areas being absorbed into neighbouring polygons.

The coverage is maintained on a continual basis. It is frequently used by clients in the field who report errors.

On public land over a 20 year cycle, each region of the state is progressively re-photographed and new photo-interpretation is carried out. Intermittent photo-interpretation is carried out, as needed, from updated photos from smaller aerial photography projects. On private land areas are scanned for change using recent satellite imagery.

Logical Consistency

Logical consistency tests for correctness, consistency and completeness were conducted on this dataset before insertion into the GIS library, i.e. visual checking of source data; a test of item structures and definitions against the library index; a test on the completeness of valid codes and polygons; verification of table, column and item identities and definitions along with associated map tolerances; topological consistency checks to detect flaws in the spatial data; edge matching of 1:25 000 digital maps to maintain coherence in codes and lines from one map tile to another where year of photography are the same.

Completeness

PI-type classification is complete for each 1:25 000 mapsheet covering the mainland of Tasmania and offshore islands, including Macquarie Island.

Contact Information

| Organisation | Forestry Tasmania | Private Forests Tasmania |
|-------------------|---------------------------------|-------------------------------|
| Position | Resources Manager | GIS Manager |
| Mail Address 1 | GPO Box 207 | PO Box 68 |
| Mail Address 2 | | |
| Locality | Hobart | Burnie |
| State | Tasmania | Tasmania |
| Country | Australia | Australia |
| Postcode | 7001 | 7230 |
| Telephone | 03 6235 8178 | 03 6434 7246 |
| Facsimile | 03 6235 8252 | 03 6334 6200 |
| Email | martin.stone@forestrytas.com.au | phil.donnelly@dier.tas.gov.au |
| Webpage | www.forestrytas.com.au | www.privateforests.tas.gov.au |
| Metadata Date | | |
| Metadata | 2010 02 15 | t. |

Metadata Date

2010-02-15

Additional Metadata

Additional Metadata Attribute metadata in <u>forestgroup_attributes.htm</u>.

The history, process, uses and content of Forestry Tasmania's PI-Typing are described in:

Stone, M.G. (1998) Forest-type mapping by photo-interpretation: A multi-purpose base for Tasmania's forest management. *Tasforests* 10:15-30

Forestgroup attributes

| FORGROUP | COMMENTS |
|----------|---|
| # | No Data |
| ELF | Low Native Eucalypt Forest (Current or potential canopy height < 34m) |
| ETF | Tall Native Eucalypt Forest (Current or potential canopy height >34m) |
| NON | Non-Forest |
| ONF | Other Native Forest (Predominantly Acacia spp.) |
| PHW | Hardwood Plantation |
| PSW | Softwood Plantation |
| RFT | Rainforest (Subtemperate mytle rainforest) |
| ZZZ | Sea |