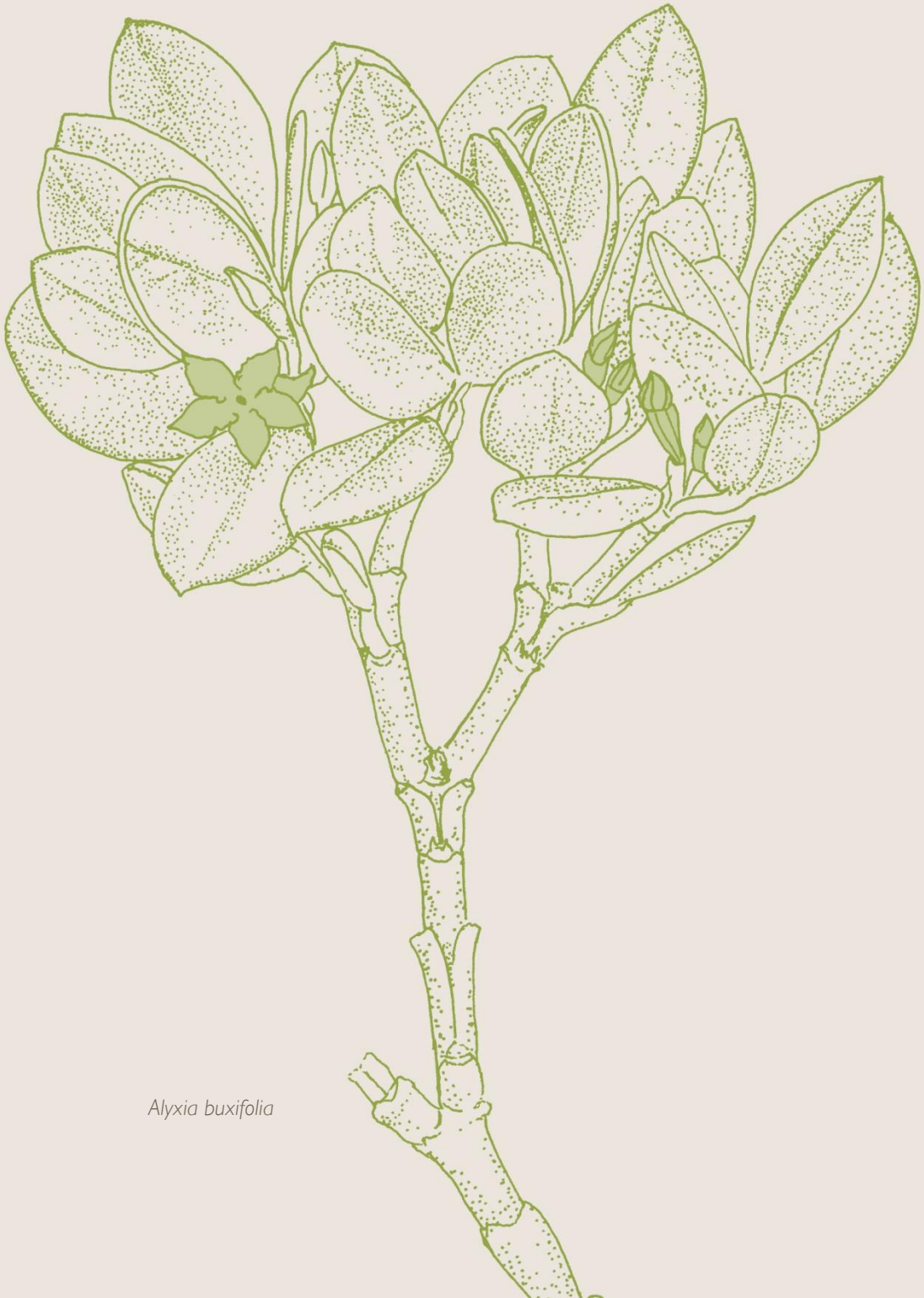
Edition 2 *From Forest to Fjaeldmark*

# *The Vegetation Communities*

## Guide to the descriptions and Intersectional key



*Alyxia buxifolia*

# Explanation of format

Edition 2 is a web-based publication. In this edition the 162 mapping units used in TASVEG 3.0 are collected under twelve broad groups, each presented as a separate pdf under the general heading of *The Vegetation Communities*. All vegetation is included, with most of the exotic vegetation types included within the *Modified land* section.

An *Intersectional key* is provided below to direct the reader to the most appropriate vegetation grouping. In using the key the following cautionary information should be noted. Vegetation mapping is constrained by mapping scale such that only the dominant vegetation in an area will be represented. Vegetation is mapped into polygons labelled with the mapping unit best matching the floristic assemblage of the vegetation. Mapping units may include vegetation varying beyond the specified structural range of height and cover specified in the key to mapping units. Whilst the key may not cover all exceptions, it nevertheless provides a guide to the most commonly observed structural form of vegetation included by each unit. The introductory information provided for each of the broad vegetation groups, and the unit vegetation descriptions should be consulted prior to assigning unit categories to vegetation. Field validation is normally required for a definitive allocation of vegetation code.

A glossary of terms used in the descriptions is included in the section *Glossary, Abbreviations and Appendices.*

At the beginning of each of the twelve sections following the Index to the communities, there is a General description of the broad vegetation category, which attempts to explain the relationship between the mapping units. General management issues are briefly described. This is followed by some key References to the scientific literature dealing with that vegetation type. A Key to the mapping units described under the broad grouping is included.

The description for each mapping unit is subdivided as follows:

The Title of the mapping unit and its unique three letter code.

A colour Photograph showing typical habitat. The location of the photograph is given and the photographer acknowledged.

An Example locality is nominated, which may be a relatively accessible site or area where the vegetation community may be viewed. More than one locality is given if there are distinct facies that could not be demonstrated by one site.

The Distinguishing features and similar communities describe the key attributes of the mapping unit that distinguish it from others. It is particularly salient when considering very similar communities.

Where the mapping unit is also a RFA forest community, the corresponding RFA code is supplied as RFA mapping unit.

The Distribution of the community is given as a general geographic descriptor and is accompanied by a distribution map.

Bioregional occurrence is a list of the Interim Biogeographic Regions for Australia (IBRA) version 7.0 bioregions (SEWPAC, 2012) given as unique three letter codes, within which the community has been mapped. They are: King (KIN), Tasmanian Northern Slopes (TNS), Furneaux (FUR), Ben Lomond (BEL), Tasmanian Northern Midlands (TNM), Tasmanian Central Highlands (TCH), Tasmanian West (TWE), Tasmanian Southern Ranges (TSR), Tasmanian South East (TSE) and Subantarctic Islands (SAI). A map of these regions (excluding SAI) is located further below.

Site characteristics, habitat and ecology are described in general terms for the mapping unit. This is derived from the experience of vegetation mappers and also from the scientific literature.

Successional pathway is included to describe the temporal stability of a mapping unit. The pathway indicates the conditions under which structural and/or floristic stability of the vegetation is maintained or otherwise and provides guidance, where relevant, as to other TASVEG units available for mapping precursor or successive ecological communities. At this time, information on the successional pathway of vegetation has only been provided for the *Scrub, heathland and coastal complexes* and *Macquarie Island vegetation* sections.

Vegetation composition and structure are described according to the community floristics and the layers in the community. Dominant species for each structural layer are given where possible. The focus of the description is the 'core' vegetation mapped by the unit; important facies are sometimes described separately.

Floristic communities known to occur in this mapping unit are the available descriptions of floristic communities that are related to each TASVEG Mapping Unit. Communities are generally limited to those covered by state-wide assessments of the respective vegetation type and from published sources. The prime reference has been Kirkpatrick et al. (1995) and the communities listed first under this heading, if unattributed, are from this source. The communities in Kirkpatrick et al. (1995) are compiled from various previous studies, some being previously listed in Kirkpatrick (1991).

Subsequent statistically-derived plant community associations include alpine vegetation (Kirkpatrick 1997), heathland (Kirkpatrick & Harris 1999) and riparian (Daley & Kirkpatrick 2004). Communities from these studies have been added although the heathland communities (not named in the document) are referenced at the dominance level only. The Forest Botany Manual (Forest Practices Authority 2005) is also referenced. A number of additional references to floristic communities have been used within the *Scrub, heathland and coastal complexes* section. For this group, the floristic communities equivalent to the mapping units are also presented as a separate section - *Table of Floristic Equivalents.* The primary reference for floristically equivalent communities for *Macquarie Island Vegetation* is the report by Taylor (1955) *The flora, vegetation and soils of Macquarie Island*, although other published floristic communities can be found in the journal article by Adamson et al. (1993) *Serpentinite, harzburgite, and vegetation on subantarctic Macquarie Island*.

Where floristic communities occur in more than one mapping unit then this is indicated.

## References and further reading


Adamson, D.A., Selkirk, J.M. & Seppelt, R.D., 1993: Serpentinite, harzburgite, and vegetation on subantarctic Macquarie Island. *Arct. Alp. Res.* **25**(3): 216-219.

Daley, E.A. & Kirkpatrick, J. B. (2004) Native Riparian Vegetation in Tasmania. *Cunninghamia.* **8**(4), 409-430.

Forest Practices Authority (2005) *Forest Botany Manual.* Forest Practices Authority, Hobart, Tasmania.

Kirkpatrick, J.B. & Harris, S. (1999) *The Disappearing Heath Revisited.* Tasmanian Environment Centre, Hobart.

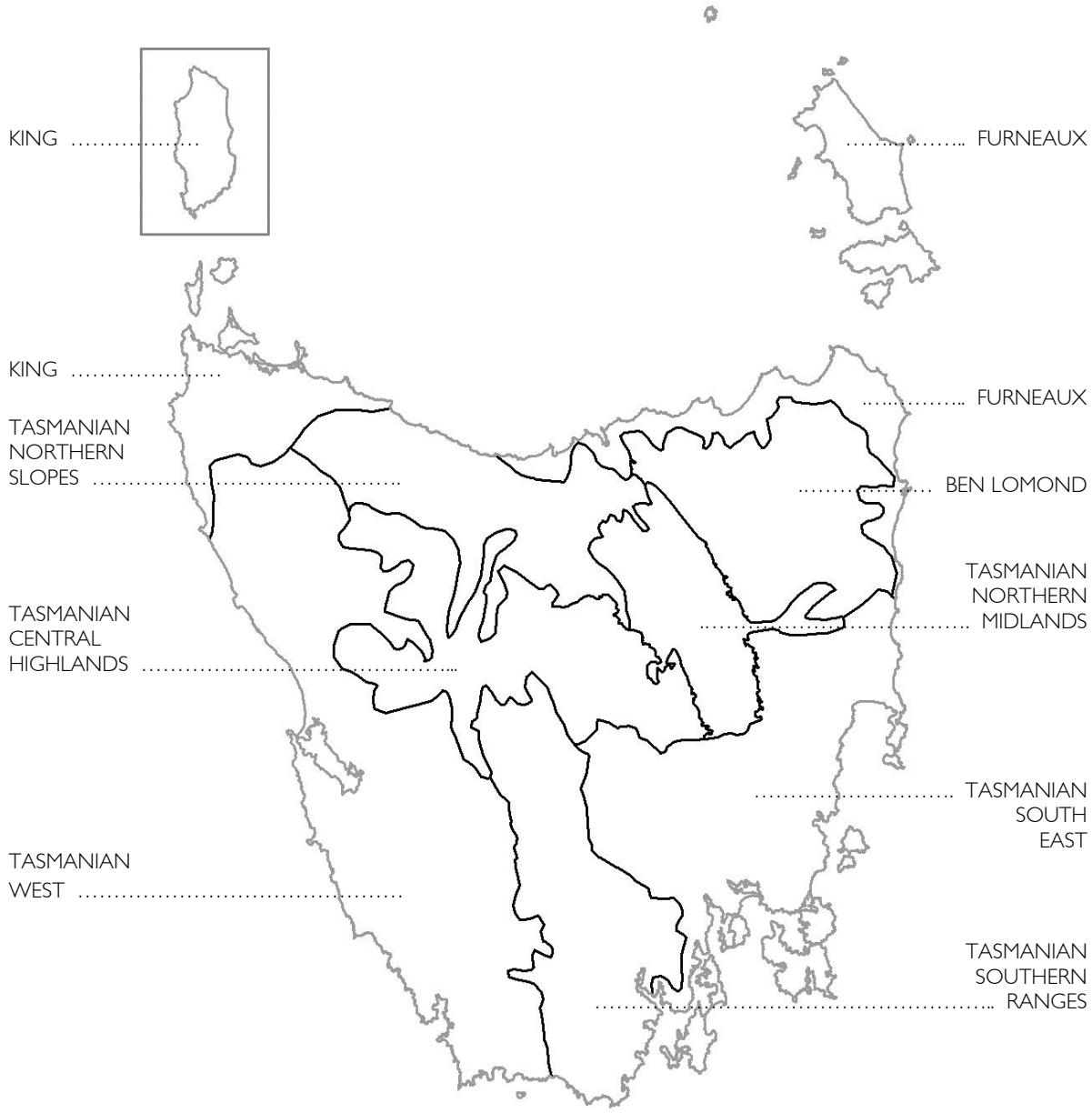
Kirkpatrick, J.B. (1991) Reservation status of plant communities in Tasmania. In: *Tasmanian Native Bush: A management Handbook* (Ed. Kirkpatrick, J.B.) Tasmanian Environment Centre Inc, Hobart.

Kirkpatrick, J.B., Barker, P., Brown, M.J., Harris, S. and Mackie, R. (1995) The reservation status of Tasmanian vascular plant communities. Tasmanian National Parks and Wildlife Service, *Wildlife Scientific Report 95/4*, Hobart.

SEWPaC (2012) *Interim Biogeographic Regionalisation for Australia, Version 7.* Map produced by ERIN for the National Reserve Systems Section, Australian Government Department of Sustainability, Environment, Water, Population and Communities, Canberra, May 2012.

Taylor BW (1955*) 'The flora, vegetation and soils of Macquarie Island'.* ANARE Scientific Report, Series B, vol 2. Antarctic Division, Department of External Affairs, Melbourne.

# Biogeographic Regions of Tasmania (IBRA Version 7.0)




Note: Macquarie Island, which fits within the Subantarctic Islands Bioregion, is not depicted here.

# Intersectional Key

| | | |
|---|---|---|
| 1a | Vegetation occurs on Macquarie Island | ***Macquarie Island vegetation*** |
| 1b | Vegetation does not occur on Macquarie Island | **Go to 2** |
| 2a | Vegetation absent or sparse (excludes non-inundated wetlands) OR Plantation OR Vegetation where the cover of perennial exotic species exceeds 50% of the dominant native stratum | **Go to 3** |
| 2b | Native tree canopy persists but the understory has been cleared and/or replaced with exotic species and is not expected to return a native understorey in the medium term (~50 years) | ***Modified land*** |
| 2c | Vegetation dominated by native plant species, NOT 2b | **Go to 4** |
| 3a | Natural areas of water, sea, sand, mud or rock | ***Other natural environments*** |
| 3b | Highly modified and/or exotic vegetation or anthropogenic features | ***Modified land*** |
| 4a | Trees absent or if present then having a solid crown cover of <5% | **Go to 5** |
| 4b | Trees greater than (or potentially greater than) 5 m tall present with a (potential) solid crown cover > 5% | **Go to 6** |
| 5a | Vegetation < 2m tall of alpine areas including shrubland, herbland, sedgeland and fernland in which the following genera are absent or a minor component: *Diplarrena*, *Poa*, *Gymnoschoenus*, *Lepidosperma*, *Melaleuca* and *Leptospermum* | ***Highland treeless vegetation*** |
| 5b | Vegetation other than 5a (i.e. all grassland and wetland vegetation as well as all woody and non-woody non-alpine vegetation) | **Go to 11** |
| 6a | Trees from genus *Eucalyptus* forming a solid crown cover >5% | **Go to 7** |
| 6b | Trees from genus *Eucalyptus* are absent or have a solid crown cover of <5% | **Go to 9** |
| 7a | Forest on the Furneaux Islands OR elsewhere forest with an understorey composed of either a) open or scattered thickets of uneven-aged trees and shrubs b) hard narrow-leaved shrubs, and/or c) *Pteridium esculentum*, grasses, sedges or other graminoids | ***Dry eucalypt forest and woodland*** |
| 7b | Forest with an understorey composed of either a) rainforest species; b) a single-aged cohort of non-rainforest trees or shrubs c) tree ferns or d) *Gahnia grandis* | **Go to 8** |

**See next page of key**

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|---|---|---|
| 8a | Forest with a canopy dominated by any of the following *Eucalyptus* species: *E. amygdalina, E. coccifera, E. gunnii, E. ovata* or *E. sieberi* | ***Dry eucalypt forest and woodland*** |
| 8b | All other wet eucalypt forest communities | ***Wet eucalypt forest and woodland*** |
| 9a | Rainforest trees dominate the canopy; or stags of dead *Athrotaxis* spp. present | ***Rainforest and related scrub*** |
| 9b | Rainforest trees do not dominate the canopy | **Go to 10** |
| 10a | Tallest stratum dominated by *Olearia argophylla*, *Bedfordia salicina*, *Pomaderris apetala* or *Notelaea ligustrina* | ***Scrub, heathland and coastal complexes*** |
| 10b | Tallest stratum > (5) 8 m in height, dominated by any of the following genera: *Acacia, Allocasuarina, Callitris*, *Bursaria, Leptospermum, Melaleuca* or the species *Banksia serrata* | ***Non-eucalypt forest and woodland*** |
| 11a | Vegetation in which shrubs contribute >30% cover | **Go to 12** |
| 11b | Vegetation in which shrubs contribute <30% cover | **Go to 13** |
| 12a | Shrublands dominated by rainforest species | ***Rainforest and related scrub*** |
| 12b | Shrublands in which rainforest species do not dominate the canopy | ***Scrub, heathland and coastal complexes*** |
| 13a | Grasses prominent with or without forbs; *Phragmites australis* absent | **Go to 14** |
| 13b | Grasses not prominent, OR grassland dominated by *Phragmites australis* | **Go to 15** |
| 14a | Grassy vegetation of highland areas co-dominated by sedges (especially *Lepidosperma filiforme*) and/or cord rushes | ***Moorland, sedgeland, rushland and peatland*** |
| 14b | All other grassland vegetation | ***Native grassland*** |
| 15a | *Dicksonia antarctica* or *Histiopteris incisa* dominated fernland surrounded by rainforest | ***Rainforest and related scrub*** |
| 15b | Coastal herbland, wetland vegetation or vegetation dominated by *Gymnoschoenus sphaerocephalus* or Restionaceae species | **Go to 16** |

**See next page of key**

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|---|---|---|
| 16a | Wetland vegetation or buttongrass moorland | **Go to 17** |
| 16b | Dry coastal herbland | |
| | | ***Scrub, heathland and coastal complexes*** |
| 17a | Mosslands, sedgelands, rushlands, shrublands or herblands in which *Gymnoschoenus sphaerocephalus*, *Lepidosperma filiforme*, Restioncaeceae spp. or *Sphagnum* spp. are prominent or nearby | |
| | | ***Moorland, sedgeland, rushland and peatland*** |
| 17b | Treeless vegetation regularly or permanently submerged by water or subject to tidal inundation (excludes vegetation dominated by *Sphagnum* spp., *Poa* spp., *Gymnoschoenus sphaerocephalus*, *Lepidosperma filiforme*, and members of Restionaceae other than *Sporadanthus brownii*) | |
| | | ***Saltmarsh and wetland*** |