

## Appendix eight: GRFVS plant communities

15. Thicket: *Melaleuca* spp. / mixed spp. (Mssp/mx)

The thicket plant community occurs on the footslopes and isolated mesas to the west of the Moresby Range, and includes the steep slopes of the Oakajee and Buller Rivers to the east of the North-West Coastal Highway. It is often dominated by one of a number of *Melaleuca* species, including *M. megacephala*, *M. concreta*, *M. coronicarpa* and *Melaleuca fulgens* subsp. *steadmanii*, but is usually a mixed thicket consisting of many species.

<b>Area in GRFVS:</b>	<b>% of GRFVS area:</b>	<b>Quadrats:</b>	GRV0810, 25, 39, 40, 41, 53, 55, 63
469.57 ha	7.61	(8)	

<b>NVIS description:</b>	Sparse Shrubland, Sparse Vineland, Open Heathland, Open Sedgeland, Open Shrubland, Shrubland, Forbland, Closed Shrubland
<b>Keighery description:</b>	Open Shrubland, Tall Open Scrub, Shrubland, Tall Shrubland, Closed Low Heath
<b>Muir description:</b>	Open Low Scrub B, Low Scrub B, Low Scrub A, Scrub, Thicket, Dense Low Heath D

The following common species were recorded:

<b>Tall shrubs:</b>	<i>Acacia tetragonophylla</i> , <i>Grevillea pinaster</i> , <i>Melaleuca megacephala</i>
<b>Mid shrubs:</b>	<i>Acacia congesta</i> , <i>Acacia neurophylla</i> , <i>Allocasuarina campestris</i> , A species of conservation significance, <i>Melaleuca concreta</i> , <i>Melaleuca fulgens</i> subsp. <i>steadmanii</i> , <i>Petrophile seminuda</i>
<b>Low shrubs:</b>	<i>Astroloma serratifolium</i> , <i>Calytrix depressa</i> , <i>Cryptandra arbutiflora</i> var. <i>borealis</i> , <i>Melaleuca coronicarpa</i> , <i>Melaleuca radula</i> , <i>Verticordia chrysantha</i>
<b>Climbers:</b>	<i>Clematicissus angustissima</i> , <i>Comesperma integerrimum</i> , <i>Dioscorea hastifolia</i> , <i>Thysanotus manglesianus</i>
<b>Sedges and rushes:</b>	<i>Desmocladius asper</i> , <i>Lepidosperma</i> spP1 Small Head, <i>Schoenus latitans</i>
<b>Grasses:</b>	<i>Amphipogon caricinus</i> , <i>Austrostipa elegantissima</i> , * <i>Avena barbata</i> , <i>Neurachne alopecuroidea</i>
<b>Herbs:</b>	* <i>Arctotheca calendula</i> , <i>Borya sphaerocephala</i> , <i>Caesia micrantha</i> , <i>Dichopogon capillipes</i> , * <i>Hypochoeris glabra</i> , <i>Lawrencella rosea</i> , <i>Podolepis lessonii</i> , <i>Rhodanthe spicata</i> , <i>Waitzia acuminata</i>
<b>Landform:</b>	Gentle or steep, slope or hilltop
<b>Geology:</b>	<p>Mostly on the Northampton soil system, however there are some areas where the Moresby soil system occurs within the GRFVS area. This plant community occurs on the following soil subsystems:</p> <ul style="list-style-type: none"> <li>Northampton 1 Dissected granulite Phase soil subsystem: 225No_1GrD, dissected country dominated by granulite parent material. Geology: granulites dominate with dolerite dykes and remnants of some Jurassic sediments in areas.</li> <li>Northampton 1 Rolling granulite Phase soil subsystem: 225No_1GrR, gently rolling terrain. Red shallow loam with deep and shallow red duplex soils, occasionally alkaline, pale deep sand and yellow/brown duplexes. Geology: granulites dominate with dolerite dykes and remnants of some Jurassic sediments in areas.</li> </ul>



Appendix eight: GRFVS plant communities



Plate A8.15.3: Photo direction: SE  
Location: GRV0853, White Peak  
Photographer: L. Atkins



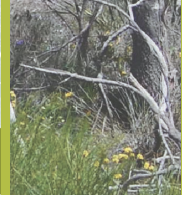
Plate A8.15.4: Photo direction: SE  
Location: GRV0855, White Peak  
Photographer: L. Atkins



Plate A8.15.5: Photo direction: SE  
Location: GRV0863, Waggrakine  
Photographer: L. Atkins



Plate A8.15.6: Photo direction: S  
Location: 268723 E, 6834756 N,  
Buller River  
Photographer: J. Nelson



## Appendix eight: GRFVS plant communities

### 16. Woodland: *Acacia acuminata* / *A. tetragonophylla* / *Hakea preissii* (Aa/At/Hp)

The *Acacia acuminata* / *A. tetragonophylla* / *Hakea preissii* woodlands and shrublands are restricted to the loamy soils of the Northampton soil system.

This plant community is dominated by tree and tall shrub species, climbers, grasses and herbs, with few low or mid-shrubs. Floristically it is most similar to plant community 15 Thicket: *Melaleuca* spp. / mixed spp. and plant community 17 Woodland: *Eucalyptus loxophleba*, from which it is separated by vegetation structure and dominant species. Occasional *Eucalyptus loxophleba* trees may occur within this community, illustrated in Plate A8.16.4.

In some areas that would previously have supported plant community 15 Thicket: *Melaleuca* spp. / mixed spp., grazing has reduced the vegetation to unpalatable species including *Acacia tetragonophylla* and *Hakea preissii*, which are characteristic of this plant community. In the upper reaches of the Buller and Oakajee Rivers, this plant community occupies areas that, in the riparian zone further downstream, would be plant community 2 Riparian: *Eucalyptus camaldulensis* / *Casuarina obesa* / *Melaleuca raphiophylla*.

<b>Area in GRFVS:</b>	<b>% of GRFVS area:</b>	<b>Quadrats:</b>	GRV0811, 23, 44
452.11 ha	7.33	(3)	

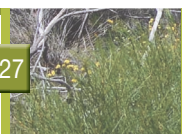
**NVIS description:** Open Woodland, Woodland

**Keighery description:** Low Open Woodland, Low Woodland

**Muir description:** Open Low Woodland B, Low Woodland B

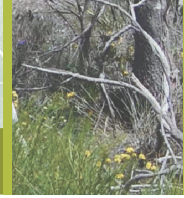
The following common species were recorded:

<b>Trees:</b>	<i>Acacia acuminata</i> , <i>Hakea preissii</i>
<b>Tall shrubs:</b>	<i>Acacia daphnifolia</i> , <i>Acacia tetragonophylla</i>
<b>Mid shrubs:</b>	<i>Pimelea microcephala</i> subsp. <i>microcephala</i>
<b>Low shrubs:</b>	<i>Banksia fraseri</i> var. <i>ashbyi</i>
<b>Climbers:</b>	<i>Clematicissus angustissima</i> , <i>Dioscorea hastifolia</i> , <i>Thysanotus manglesianus</i>
<b>Sedges and rushes:</b>	<i>Schoenus clandestinus</i>
<b>Grasses:</b>	<i>Austrostipa elegantissima</i> , <i>Austrostipa scabra</i> , * <i>Avena barbata</i> , * <i>Vulpia myuros</i>
<b>Herbs:</b>	<i>Borya sphaerocephala</i> , <i>Caesia micrantha</i> , * <i>Cuscuta planiflora</i> , <i>Erodium cygnorum</i> , <i>Hypoxis glabella</i> , <i>Podolepis lessonii</i> , <i>Rhodanthe spicata</i> , <i>Velleia cycnopotamica</i>
<b>Landform:</b>	Gentle slope
	Northampton soil system, in the subsystems listed below:
<b>Geology:</b>	<ul style="list-style-type: none"> <li>• Northampton 1 Dissected Granulite Phase soil subsystem: 225No_1GrD, dissected country dominated by granulite parent material. Geology: granulites dominate with dolerite dykes and remnants of some Jurassic sediments in areas.</li> </ul>



## Appendix eight: GRFVS plant communities

<b>Geology: (cont.)</b>	<ul style="list-style-type: none"> <li>Northampton 1 Rolling granulite Phase soil subsystem: 225No_1GrR, gently rolling terrain. Red shallow loam with deep and shallow red duplex soils, occasionally alkaline, pale deep sand and yellow/brown duplexes. Geology: granulites dominate with dolerite dykes and remnants of some Jurassic sediments in areas.</li> </ul>
<b>Surface rock:</b>	0-10% sandstone or dolerite, fragments to 30 cm
<b>Soil:</b>	Red brown, brown or orange yellow sandy loam or sandy clay
<b>% Cover leaf litter:</b>	2-50
<b>% Weed cover:</b>	10-70
<b>% Cover bare ground:</b>	15-50
<b>Notes:</b>	One of the floristic quadrats determined to be in this plant community, and used to form the description (GRV0823) is mapped as occurring on the Tamala soil system, in deep yellow sand. The soil at the quadrat location does not map this description, and, as the mapped boundary is only approximately 20 m from the quadrat location, it is assumed the boundary is inaccurate and the quadrat is located in the nearby Northampton soil system.



## Appendix eight: GRFVS plant communities



Plate A8.16.1: Photo direction: SE  
Location: GRV0811, Oakajee  
Photographer: L. Atkins



Plate A8.16.2: Photo direction: SE  
Location: GRV0823, Oakajee  
Photographer: L. Atkins



Plate A8.16.3: Photo direction: SE  
Location: GRV0844, Howatharra  
Photographer: L. Atkins



Plate A8.16.4: Photo direction: SE  
Location: 267057 E, 6836910 N,  
Oakajee  
Photographer: J. Nelson



## Appendix eight: GRFVS plant communities

17. Woodland: *Eucalyptus loxophleba* (EI)

The *Eucalyptus loxophleba* woodland plant community is separated from the *Acacia acuminata* / *A. tetragonophylla* / *Hakea preissii* woodland plant community by dominant species and lifeform, but occurs on the same soil system. Occasionally it occurs on soil-filled pockets on rocky slopes that are otherwise plant community 15 Thicket: *Melaleuca* spp. / mixed spp.

<b>Area in GRFVS:</b>	<b>% of GRFVS area:</b>	<b>Quadrats:</b>	GRV0842
17.06 ha	0.28	(1)	

**NVIS description:** Open Woodland

**Keighery description:** Low Open Woodland

**Muir description:** Open Low Woodland A

The following common species were recorded:

**Trees:** *Eucalyptus loxophleba* subsp. *loxophleba*, *Hakea preissii*

**Tall shrubs:** *Acacia tetragonophylla*, *Pittosporum angustifolium*

**Mid shrubs:** *Daviesia divaricata*, *Olearia dampieri*, *Pimelea microcephala* subsp. *microcephala*, *Scaevola spinescens*

**Low shrubs:** *Acacia ulicina*, *Enchylaena tomentosa*, *Rhagodia latifolia* subsp. *recta*

**Climbers:** *Aphanopetalum clematideum*

**Grasses:** *Austrostipa elegantissima*, \**Avena barbata*, *Neurachne alopecuroidea*

**Herbs:** *Dianella revoluta*, *Ptilotus exaltatus*

**Landform:** Flat hilltop

**Geology:** Northampton 1 Rolling granulate Phase soil subsystem: 225No\_1GrR, gently rolling terrain. Red shallow loam with deep and shallow red duplex soils, occasionally alkaline, pale deep sand and yellow/brown duplexes. Geology: granulates dominate with dolerite dykes and remnants of some Jurassic sediments in areas.

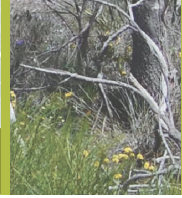
**Surface rock:** None

**Soil:** Red brown sandy loam

**% Cover leaf litter:** 0-25                      **% Cover bare ground:** 45

**% Weed cover:** <1

**Notes:** Although this plant community is restricted to a small area within the GRFVS area, a similar community is common outside it. Most *Eucalyptus loxophleba* woodlands within agricultural areas, including in the GRFVS area, are degraded, and are grazed and often weedy. Relatively undisturbed areas within the agricultural zone are uncommon.



## Appendix eight: GRFVS plant communities



Plate A8.17.1: Photo direction: SE  
Location: GRV0842, Oakajee  
Photographer: L. Atkins



Plate A8.17.2: Photo direction: E  
Location: 269624 E, 6838905 N,  
Oakajee  
Photographer: J. Nelson

