



*Exposed dry slopes at Doctors Hills behind Swansea dominated by Eucalyptus viminalis and Eucalyptus pulchella on a shallow stony duplex soil.*

LAND SYSTEM  
Rocky Hills

272142

Area (ha):  
31900



COMPONENT	B	C	D	E
PROPORTION(%)	30	20	10	10
RAINFALL (mm)	Approximate Annual Rainfall: 500-625			
GEOLOGY	Jurassic Dolerite			
TOPOGRAPHY	Hills and Associated Flats			
	Exposed Crests	Exposed Slopes	Well Drained Rocky Flats	Protected Slopes/Gullies
	10	20	2	2
	Low woodland/Low	Low Woodland/		
Structure	Open Woodland	Low Open Woodland	Woodland/Open Forest	Woodland/Open Forest
Floristic Association (See Appendix 1 for common names)	Eucalyptus amygdalina	Eucalyptus amygdalina	Eucalyptus amygdalina	Eucalyptus globulus
	Eucalyptus pulchella Casuarina stricta Callitris rhomboidea	Eucalyptus viminalis Eucalyptus pulchella Acacia mearnsii Lepidosperma lineare Poa rodwayi Deyeuxia quadrifida Stipa mollis Cheilanthes tenuifolia Bursaria spinosa Themeda australis Casuarina littoralis	Casuarina littoralis Lepidosperma laterale Melaleuca gibbosa Leptospermum scoparium Poa hookeri Deyeuxia quadrifida Helichrysum dealbatum	Pomaderris apetala Beyeria viscosa Zlerla arborescens Bursaria spinosa Coprosmia quadrifida Acacia mucronata Pteridium esculentum Acacia dealbata Acacia verticillata
				Gahnia grandis Melaleuca squarrosa Leptospermum lanigerum
SOIL				
Surface(A)Texture	Loam	Clay Loam	Clay Loam	Clay Loam
B Horizon( subsoil) Colour (moist) Texture and primary profile form	Extremely shallow stony loam - very dark brown (10 YR 2/2) to black (7.5 YR 2/0) on bedrock. Uniform.	Extremely shallow stony heavy clay - dark reddish brown (5 YR 3/4) to dark yellowish brown (10 YR 3/4) on bedrock. Duplex.	Deep heavy clay - Dark yellowish brown (10 YR 4/6) Duplex.	Deep stony heavy clay -dark brown (7.5 YR 3/4) Duplex.
				Deep heavy clay - yellowish brown (10 YR 5/6) to grey/ light grey (2.5 YR 6/0) Uniform.
Permeability	High	High/Moderate	Moderate	Moderate
Typical depth(m)	0.10	0.35	0.80	>1.40
LAND USE	Forestry, Grazing, Nature Conservation			
HAZARDS	Low Sheet	Rill Erosion	Streambank erosion	Waterlogging/flooding

272142

ROCKY HILLS

This land system includes hilly lowland dolerite country between Little Swanport and Swansea. It also includes areas near the Swan River and Moulting Lagoon. It has been extrapolated to include similar country on Freycinet Peninsula and Schouten Island.

Exposed crests and slopes commonly contain an extremely shallow (e.g. <0.10 m), stony, uniform very dark brown or black loam developed on bedrock. This soil supports a low woodland dominated by *Eucalyptus amygdalina* over an understorey that may include *Callitris rhomboidea*, and *Casuarina stricta*, *Eucalyptus barberi*, *Leptospermum grandiflorum*, *Cyathodes divaricata*, and *Xanthorrhoea australis*.

Exposed slopes usually have an extremely shallow (0.35 m) stony duplex soil with a clay loam surface over a dark reddish brown to dark yellowish brown heavy clay. This supports a low woodland to low open woodland dominated by *Eucalyptus amygdalina*, *Eucalyptus viminalis* and *Eucalyptus pulchella* over an understorey that includes *Acacia mearnsii*, *Lepidosperma lineare*, *Poa rodwayi*, *Deyeuxia quadriseta*, *Stipa mollis*, *Cheilanthes tenuifolia*, *Bursaria spinosa*, *Themeda australis* and *Casuarina littoralis*.

Well drained rocky flats typically have a deep (0.80 m) duplex soil with a clay loam surface over a dark yellowish brown heavy clay. This supports a woodland/open forest dominated by *Eucalyptus amygdalina* over an understorey of *Casuarina littoralis*, *Lepidosperma laterale*, *Melaleuca gibbosa*, *Leptospermum scoparium*, *Poa hookeri*, *Deyeuxia quadriseta* and *Helichrysum dealbatum*.

Protected lower slopes and gullies often contain a deep (>1.40 m) stony duplex soil with a clay loam surface over dark brown heavy clay. This supports a woodland/open forest dominated by *Eucalyptus globulus* over a dense understorey of *Pomaderris apetala*, *Beyeria viscosa*, *Zieria arborescens*, *Bursaria spinosa*, *Coprosma quadrifida*, *Acacia mucronata*, *Pteridium esculentum*, *Acacia dealbata* and *Acacia verticillata*,

Drainage flats often have a deep (>1.40 m) uniform yellowish brown to light grey clay that supports a woodland/open forest dominated by *Eucalyptus ovata* over an understorey of *Gahnia grandis*, *Melaleuca squarrosa* and *Leptospermum lanigerum*.

Forestry, grazing and nature conservation are the major land uses. Erosion hazards are rated low within the land system although streambank erosion, flooding and waterlogging are problems on drainage flats. Duncan and Duncan (1984) have described the vegetation within this land system, at Cherry Tree Hill near Cranbrook. The land system is closely related to the Stony Hills (272141) Land System.

See photo on previous page.