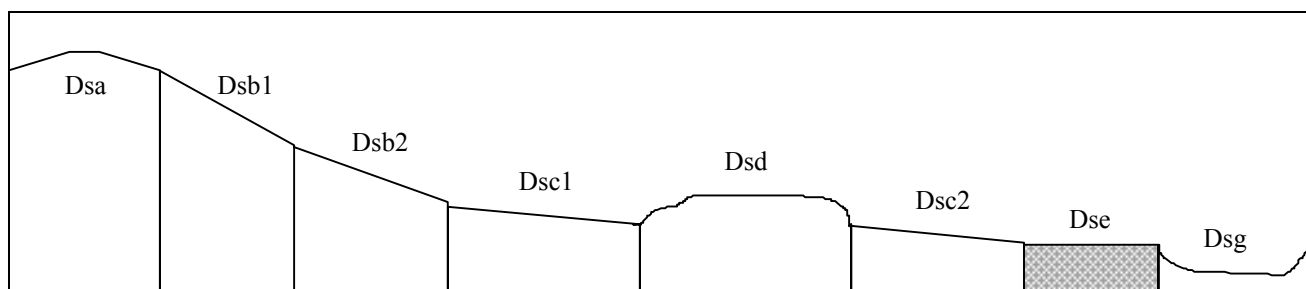


Land Unit: Devonian sediments, gentle slopes	Land Unit symbol: Dse
	% of study area: 9.5



General Description:

This land unit occurs on the lower slopes of the Devonian sediments, however there are areas of < 3% slope, which are too small to map, that have wetter profiles than the one described below (Site 78). Distinct mottling is common in the subsoil and Ksat values can be as low as 10 mm per day. Surface runoff is high from these areas but can be minimised by maintaining a dense pasture sward which improves soil structure and prevents the topsoil compacting. Site 136 represents a transition zone between Dsc2 and Dse.

Site characteristics:

Site No. 78 and 136

Parent material		Depth to seasonal watertable:	> 2 m
Age:	Devonian	Potential recharge to groundwater:	Low
Lithology:	Sandstones and siltstones	Flooding risk:	Nil
Landform		Drainage:	Imperfectly drained
Pattern:	Undulating rises	Depth to hardrock:	1.2 m
Element:	Lower slope	Rock outcrop:	0%
Slope		Annual rainfall:	940 mm
Common:	5%		
Range:	3 - 10%		
Native vegetation:	Broad-leaf and Narrow-leaf Peppermint, Blackwood, Silver Wattle, Candlebark Gum		
Present land use:	Cleared; native and improved pastures for the grazing of sheep and cattle		

Land degradation:

Degradation process	Water erosion		Wind erosion	Salting	Acidification
	Sheet/rill	Gully			
Susceptibility	Moderate	Moderate	Low	Low	High
Incidence	Low	Low	Nil	Nil	Moderate

Soil profile characteristics:

Permeability	(measured - average, range):	50 (30 - 80) mm/day
	(estimated):	-
Available water capacity:	170 mm H ₂ O	
Linear Shrinkage (B horizon):	15%	

Soil profile description:**Land Unit symbol:** Dse

A1 0 - 6 cm	Brown (7.5YR5/4) loam fine sandy, weak subangular blocky structure, peds 5 mm, rough fabric, moderately weak consistence - slightly moist, high organic matter, pH 4.8. Clear transition to:
A2e 6 - 25 cm	Dark yellowish brown (10YR4/6) fine sandy loam, conspicuously bleached (10YR7/4 - dry), apedal massive (structure), moderately weak consistence - dry, very few angular sandstone gravel fragments, moderate organic matter pH 5.3. Clear boundary to
B21t 25 - 70 cm	Yellowish brown (10YR5/8) medium clay, few fine faint red mottles, strong subangular blocky structure, peds 20 mm, smooth fabric, very firm consistence - slightly moist, pH 5.5. Gradual transition to:
B22 70 - 95 cm	Light yellowish brown (10YR6/4) medium clay, many coarse distinct red mottles, strong angular blocky structure, peds 40 mm, smooth fabric, very firm consistence - slightly moist, pH 5.4. Gradual transition to:
B23 95 - 120 cm	Light brownish grey (2.5YR6/2) medium clay, many prominent medium size mottles, strong angular blocky structure, peds 20 mm, smooth fabric, moderately firm consistence - slightly moist, pH 5.2.

Soil classification:

Factual Key (Northcote, 1979):

Australian Soil Classification (Isbell, 1992):

Unified Soil Group:

Dy 2.41 - 3/1/025

Bleached - Mottled, Magnesic, Brown, Chromosol; thin, non-gravelly, loamy/clayey, deep MH/ML

Interpretation of soil analyses: (see Appendix 2 for analytical results)

Horizon	pH	Gravel %	E.C. (salts)	Nutrient status	P	K	Al	Organic matter	Dispersibility
A1	4.8 **	2	VL	L	S	S	T	H	L
A2e	5.3 **	2	VL	VL	D	S	T	M	L
B21t	5.5	1	VL	VL	D	M	T	L	L
B22	5.4 **	1	VL	L	D	D	T	VL	L
B23	5.2 **	4	VL	L	D	D	T	VL	L

VL: Very Low

L: Low

M: Moderate

H: High

VH: Very High

D: Deficient

S: Satisfactory

T: Toxic

NA: Not Available

** Acidic

Land capability ratings and limitations for specific land uses:

Land use	Rating	Major limiting factor(s)
Agriculture	C ₃ T ₃ S ₄	Low permeability : rainfall index
Building foundations		
- slab	4	Imperfect drainage
- stumps/footings	4	Imperfect drainage
Effluent disposal (septic tanks)	4	Imperfect drainage, low permeability
Farm dams	4	Low suitability of subsoil, shallow soils, high dispersibility of subsoil
Residential - rural	4	Low capability for effluent disposal, secondary roads and farm dams
- urban	4	Low capability for secondary roads
Scenic value	3,4 & 5	Low Scenic Quality, distance from public thoroughfares
Secondary roads	4	Imperfect drainage