

Site Code¹ **CLRA2**



Undulating rises of the Drysdale area

Location Curlewis (Scarborough Road), Drysdale district, Bellarine Peninsula

Landform Undulating Rises

Geology Neogene Hanson Plain Sand: fluvial gravel, sand, silt

Element Mid slope

Slope 5%

Aspect West-north-west

Horizon	Depth (cm)	Description
A11/Ap	0–5	Dark brown (10YR3/2); loam fine sandy; very few (2–6 mm) subrounded quartz coarse fragments; weak fine subangular blocky structure; rough ped fabric; weak consistence (dry); pH 5.5; smooth abrupt boundary to:
A12	5–25	Dark brown (10YR3/2); loam fine sandy; very few (2–6 mm) subrounded quartz coarse fragments; apedal massive structure; earthy fabric; firm consistence (dry); pH 4.8; smooth clear boundary to:
A2	25–45	Brown (7.5YR4/2); occasional bleach (10YR6/2; dry); sandy clay loam; very few (2–6 mm) subrounded quartz coarse fragments; apedal massive structure; earthy fabric; firm consistence (dry); few (6–60 mm) ferromanganiferous nodules; pH 5.5; wavy clear boundary to:
B21	45–70	Very dark grey (7.5YR3/1) with few medium brown distinct mottles; medium clay; strong coarse prismatic parting to strong medium angular blocky parting to strong fine polyhedral structure; smooth ped fabric; strong consistence; common clay skin and other cutans; pH 6.5; wavy gradual boundary to:
B22	70–100	Strong brown (7.5YR4/6) with many very large very dark grey (7.5YR3/1) prominent mottles; light medium clay; strong coarse prismatic parting to strong medium angular structure; smooth ped fabric; strong consistence (dry); common clay skin and other cutans; pH 8.0; wavy abrupt boundary to:



Melanic-vertic, Eutrophic, Black Chromosol

¹ Source: Robinson et al (2003) A land resource assessment of the Corangamite region. Department of Primary Industries, Centre for Land Protection Research Report No. 19

B3k	100–115	Light yellowish brown (10YR6/4) with few medium very dark grey (10YR3/1) prominent mottles; light medium clay; moderate coarse prismatic parting to strong medium angular structure; smooth ped fabric; common clay skin and other cutans; very firm consistence (dry); few medium organic and argillaceous tubules; many large calcareous soft segregations; pH 8.5; wavy abrupt boundary to:
C1	115–135	Brown (7.5YR4/3) with few medium very dark grey (10YR3/1) prominent mottles; heavy sandy clay loam; apedal massive structure; earthy fabric; very firm consistence (dry); few medium organic and argillaceous tubules; pH 9.0; wavy abrupt boundary to:
C2/R	135–145+	Strong brown (7.5YR4/6) with few medium very dark grey (10YR3/1) prominent mottles; sandy clay loam; apedal massive structure; earthy fabric; very firm consistence (dry); few large ferruginous fragments; pH 9.0.

Analytical data²

Site CLRA2	Sample depth	pH		EC	NaCl	Ex Ca	Ex Mg	Ex K	Ex Na	Ex Al	Ex Acidity	FC	PWP	KS	FS	Z	C
Horizon	cm	H ₂ O	CaCl ₂	dS/m	%	cmol _c /kg	cmol _c /kg	cmol _c /kg	cmol _c /kg	mg/kg	cmol _c /kg	(-10kPa) %	(-150kPa) %	%	%	%	%
A11/AP	0–5	6.1	5.6	0.15	N/R	3.7	0.77	1.1	0.17	<10	5.9	17.6	5.6	18.8	60.8	5.5	10
A12	5–25	4.8	4	<0.05	N/R	1.5	0.3	0.46	0.06	110	9	17.5	4.7	17.5	61	7	11
A2	25–45	5.4	4.7	0.05	N/R	2.4	0.45	0.3	0.1	15	5.3	16.1	4.1	20.7	58	10.5	10.5
B21	45–70	6.4	5.5	0.1	N/R	17	7.4	1.2	0.65	11	11	42.4	23.9	10.8	23.3	4	58
B22	70–100	7.3	6.6	0.14	N/R	18	9.3	1.2	0.86	N/R	N/R	47.6	23.3	3.5	32.1	4.5	57
B3k	100–115	8.3	7.8	0.23	N/R	25	6.8	0.76	0.75	N/R	N/R	37.8	17.0	N/R	N/R	N/R	N/R
C1	115–135	8.2	7.5	0.11	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
C2/R	135–145	8.5	7.9	0.23	N/R	17	5.3	0.43	0.77	N/R	N/R	26.5	11.5	19.9	43.9	3.5	28

Management considerations

Strong texture contrast between the surface soil and the subsoil is a very important soil feature. This can have a major effect by reducing and/or redirecting the internal drainage and restricting root growth due to greater resistance, gas and water throttles as well as associated chemical deterrents to growth. Options include reduced tillage, improving organic matter content and altering the subsoil through artificial drainage (ripping, mole drainage) and/or chemical amelioration (gypsum) to improve structure. Mottling usually indicates periodic waterlogging. The upper soil is very light and is dependent on maintaining or increasing

² Source: Government of Victoria State Chemistry Laboratory.

organic matter levels (OC: Ap;1.0%) to reduce the susceptibility to sheet and rill erosion(in conjunction with slope) as well as increasing the low water holding and nutrient holding capacity. The whole profile has a slight [Emerson class 3] susceptibilty to dispersion, increasing slightly in the lower subsoil [Emerson class 3(3)] but more stable where the carbonate increases [Emerson class 5].