LAND SYSTEM Tunbridge Flats

173121

Area(ha): 10549					The state of the s
COMPONENT	A	В	C	D	E
PROPORTION (%)	20	65	5	5	5
RAINFALL (mm)		Approximate A	Annual Rainfall: 375-500		
GEOLOGY		Triassic Sandstone			
TOPOGRAPHY		Low Hills and Extensive Undulating Pla:		ains	
Position	Crests/Slopes	Well Drained Flats	Saline Drainage Flats	Saline Lagoon Flats	Drainage Lines/Flats
Typical Slope()	2	0	0	0	0
NATIVEVEGETATION					
Structure	Low Open Woodland	(Low) Open Woodland	Closed/Open Sedgeland	Closed/Open Herbland	Open Woodland
Floristic Association	Eucalyptus pauciflora Eucalyptus viminalis		Gahnia trifida	Selliera radicans	Eucalyptus ovata
	Eucalyptus viminalis	Eucalyptus pauciflora	Poa sp.	Wilsonia rotundifolia	Lomandra longifolla
(See Appendix 1 for common	Eucalyptus amygdalina Euc	alyptus amygdalina	Juncus kraussii	Danthonla caespitosa	Acacia dealbata
1 TOL COMMON			Plantago coronopus	Plantago coronopus	Poa sp.
names)			Samolus repens	Puccinellia stricta	-
			Acaena novae-zelandiae	Schoenus nitens	
			Trifolium fragiferum	Galium sp.	
			Hordeum marinum	Hordeum marinum	
			Distlchlis		
			Puccinellia stricta		
SOIL					
Surface (A) Texture Sa	andy Loam/Sandy Clay Loam	Sandy Clay Loam	Light Clay	Light Clay	Medium Clay
B Horizon(subsoil)	(Stony) heavy clay -	Deep heavy clay -	Water saturated light	Deep clay on bedrock -	Deep clay - Black (10 YR
Colour (moist) Texture and primary	Brown/dark brown	dark brown (10 YR 4/3)	clay - Dark brown (10	various colours e.g.	2/1) to dark grey (10 YR
profile form	(10 YR 4/3).	Duplex .	3/3) to black (10 YR	dark grey (10 YR 3/1)	4/1).
profile form	Duplex .		to light grey (10 YR	pale brown (10 YR 6/3) to	Uniform.
			Uniform.	yellowish brown (10 YR	5).
				Uniform/ Gradational.	
Permeability	Moderate	Moderate	Low	Low	Low
Typical depth (m)	0.50	>1.40	0.50	1.10	>1.40
LAND USE		Cropping, Grazing, Nature Conservation			
HAZARDS			Waterlogging,		
	Low Erosion Hazards		Extreme Salting	Extreme Salting	Flooding, Waterlogging

173121

TUNBRIDGE FLATS

This land system near Tunbridge includes low sandstone hills, extensive undulating plains, natural salt lagoons and saline marshes in some of the driest country in Tasmania.

A stony shallow duplex soil is typical on the crests and slopes of the localised low sandstone hills. This contains a sandy loam to sandy clay loam surface (sometimes with abundant lateritic gravels) over a dark brown to red heavy clay. Salt affected soils are extensive on the plains, particularly on the drainage lines and flats. These frequently have a uniform light clay which is dark brown to black on the surface and light grey at depth.

Saline lagoon flats (e.g. Township Lagoon) typically contain a uniform or gradational light clay ranging in colour from very dark grey to pale brown at the surface to yellowish brown at depth. These salt affected soils are common on areas dominated by sandstone units of the Parmeener Supergroup. Drainage lines and flats without salting problems typically contain a deep uniform clay ranging in colour from black to dark grey.

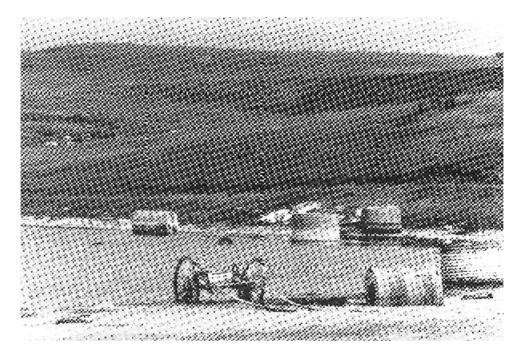
The native vegetation on the well drained crests and slopes is a low open woodland dominated by *Eucalyptus pauciflora*, *Eucalyptus viminalis* and *Eucalyptus amygdalina*. On deep uniform clays along non-saline drainage lines *Eucalyptus ovata* is often present.

Saline drainage lines contain sedge/rush/grasslands dominated by salt tolerant species. These include Gahnia trifida, Poa sp, Juncus kraussii, Selliera radicans, Samolus repens, Acaena novae - zelandiae, Distichlis distichophylla and Puccinellia stricta. A number of salt tolerant introduced species are also found such as Plantago coronopus, Hordeum marinum and Trifolium fraglferum.

Specialized herbland communities are found on the saline lagoon flats that are subject to high salinity and poor drainage. These include Wilsonia rotundifolia, Selliera radicans, Danthonia caespitosa, Puccinellia stricta, Schoenus nitens, Galium sp and introduced species such as Hordeum marinum and Plantago coronopus.

Waterlogging and flooding are major hazards along drainage lines and drainage flats, whilst salting is widespread on the saline drainage flats and near lagoons.

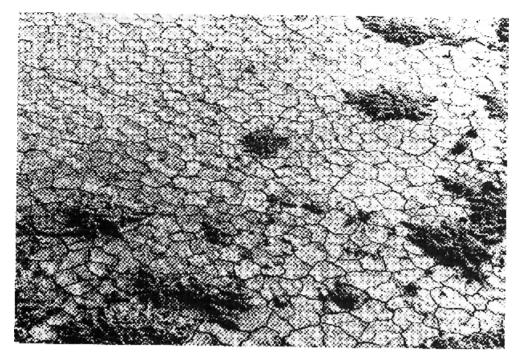
The soils in this part of the study area have been described and mapped by Leamy (1961). The land is used for cropping and grazing and is related to the Ellinthorp Plains (273122) Land System to the north-west, which also contains saline lagoons.



Township Lagoon near Tunbridge in the Tunbridge Flats (173121) Land System with dolerite hills of the She Oak Spur Land System (172131) behind.



Saline drainage lines beside the Tunbridge Tier Road west of Tunbridge dominated by Gahnia trifida, Juncus kraussii and Poa sp.



Saline lagoon flats on Township Lagoon near Tunbridge colonized by the salt tolerant native plants Wilsonia rotundifolia and Selliera radicans.