

563241

Liffey

This land system is situated in the far north west of Region 5, on the footslopes of the Cluan Tiers. Relatively gentle gradients on lower and mid slopes grade into steeper upper slopes giving an overall concave shape to the land system. Extensive sandstone sequences of the Lower Parmeener Supergroup dominate the area. Evidence for this exists in the high sand content of the soils. Minor shale and mudstone horizons occur on lower slopes, solifluction deposits of sandstone and Jurassic dolerite mantle soil profiles in the valley west of Liffey. These were probably influenced primarily by an ice cap(s) that was located on Drys Bluff during Pleistocene times. Sequences of the Lower Parmeener supergroup are likely to underlie this soil/rock mantle.

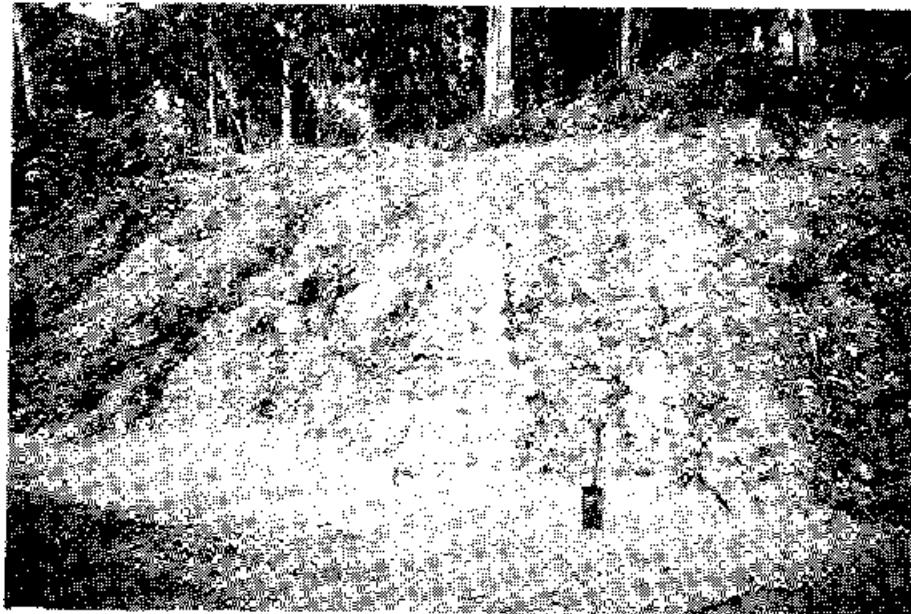
Local variations in soil textures do exist, but profiles with high sand contents dominate in most situations. Shallow stony, dark grey gradational soils occur on shale and mudstone that occupy lower slope positions. Mottled duplex forms typify profiles overlying sandstone on lower and mid slopes. Upper slopes have yellowish brown to grey gradational profiles and although sandy horizons dominate, loams and clay loams are found in places.

Tall open forests are widespread covering most components and would probably have dominated in the Liffey area prior to land clearing. Drier lower slopes have a canopy of *Eucalyptus obliqua*, *E. amygdalina*, and *E. viminalis* with *Acacia dealbata*, *A. mearnsii*, *A. melanoxylon* and *Exocarpos cupressiformis*, common in the understorey. wetter, colder positions up slope are dominated by *E. delegatensis* (replacing *E. obliqua*) and *E. dalrympleana* (replacing *E. viminalis*). These forests have an understorey of *Acacia dealbata*, *Bedfordia salicina*, *Dicksonia antarctica* and *Pomaderris apetala* which are common in wet sclerophyll forests.

The land is utilised at present for grazing and forestry. Clearing and the establishment of improved pastures has occurred in the Liffey valley. Forestry operations and extensive clearing can have serious land degradation implications for these soils derived from sedimentary rocks. They are particularly prone to rill and gully erosion while landslips may also occur. (See photograph in Section 10. 3)



Drys Bluff situated at the eastern extent of the Scarp-Great Western Tier Land System dominates over the Liffey Land System in the immediate foreground.



Rill erosion of roadside verges on duplex soils. Note siltation of drainage ditch.

LAND SYSTEM

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Area(ha): 4416



COMPONENT	1	2	3
PROPORTION(%)	40	30	30
RAINFALL(mm)	Approximate Annual Rainfall: 1000-1250		
GEOLOGY	Lower Palaeozoic Supergroup Sediments (Upper Carboniferous to Permian)		
TOPOGRAPHY	Escarpment		
Position	Broad Lower Slopes	Mid Slopes	Steep Upper Slopes
Typical Slope(°)	3-5	7-10	10-15
NATIVE VEGETATION			
Structure	Tall Open Forest	Tall Open Forest	Tall Open Forest
Floristic Association (See Appendix 1 for common names)	Eucalyptus obliqua E. amygdalina E. viminalis Acacia dealbata A. mearnsii A. melanoxylon Exocarpos cupressiformis Senecio sp.	Eucalyptus obliqua E. delegatensis E amygdalina E. dalrympleana Acacia dealbata A. melanoxylon Exocarpos cupressiformis Senecio sp.	Eucalyptus dalrympleana E. delegatensis E amygdalina Acacia melanoxylon A. dealbata Bedfordia salicifolia Pomaderris apetala Senecio sp. Bursaria spinosa Dicksonia
SOIL			
Surface(A)Texture	Clay Loam/Loamy Sand	Clayey Sand	Clayey Sand
B Horizon(subsoil) Colour (vet) Texture and	Stony, gravelly, dark grey (10 YR 4/1) gradational soil on shale or mottled dark yellowish brown (10 YR 4/6) to dark grey (7.5 YR 4/6)	Mottled dark yellowish brown (10 YR 4/6), grey (10 YR 6/1) sandy clay. Duplex.	Mottled dark yellowish brown (10 YR 4/6), grey/light grey (10 YR 6/1) sandy clay. Duplex.
Permeability	Moderate-Low	Moderate-Low	Moderate-Low
Typical depth(m)	0.50/>1.50	>1.00	>1.00
Depth(A)Horizon(m)	0.20/0.5	0.30	0.30
LAND USE	Forestry, grazing		
HAZARDS	Moderate rill and gully erosion, high landslip hazard		