

SOIL PROFILES

A particular soil is recognized by identifying the various soil layers that make up its vertical cross-section or profile. These layers, known as 'horizons', occur approximately parallel to the land surface and each soil horizon differs from adjacent genetically related layers in properties such as, colour, structure, texture, consistency and chemical, biological and mineralogical composition.

The diagrams of soil profiles shown here depict the general horizon characteristics of the soils shown on the map.

Key to code letters used in the soil profile diagrams

ORGANIC LAYERS	L-F-H - well drained decomposing plant litter
L - slightly decomposed, F - moderately decomposed, H - well decomposed	
O - poorly drained decomposing peat and moss layers	
Of - fibric - slightly decomposed, Om - mesic - moderately decomposed, Oh - humic - well decomposed	
A HORIZONS	A - organic-mineral horizons at or near the surface.
Ah - dark-coloured, humus-rich horizon	
Ae - light-coloured, bleached and eluviated by removal of clay, iron, alumina or organic matter	
Ap - horizons markedly disturbed by cultivation or pasture	
AB, BA - horizons transitional to A and B	
B HORIZONS	B - a mineral horizon differing from A and C by the following characteristics:
Bm - colour or structure	
Bt - a significant accumulation of clay	
Bn - a columnar structure, hard consistence and significantly high exchangeable sodium	
Bf - a significant accumulation of iron	
Bg - a significant accumulation of illuvial organic matter	
BC - a horizon transitional to B and C	
C HORIZONS	C - a horizon comparatively unaffected by soil-forming processes, except for:
Cca - an accumulation of lime carbonate	
Csa - an accumulation of soluble salts	
Cg - a significant expression of gleying ¹ with dull colours and mottles	
Cs - the presence of salts	
Ck - the presence of lime carbonate	

¹"Gleying" or gleysation refers to a soil-forming process operating under poor drainage conditions which results in the reduction of iron and other elements and in gray colours and mottles.

Note: The lower case code letters shown above in the B and C horizons are sometimes combined in the diagrams to express combinations of characteristics.

