



Figure 25. Deep gully formation in Wither soils. Erosion of dispersible lower layers causes undercutting and ongoing collapse of soil material above. Vegetation growing in the gullies does little to arrest the ongoing erosion, which is continuing at depth.



Figure 26. Salt and calcium carbonate precipitations in subsoil horizons.



Figure 27. Vesicular structure in the fragic horizon may be relict and a result of soil freezing.





Figure 28. The fragic horizon has multiple layers that dip down-slope. This may have formed by soil freezing at the time that loess was being deposited. Stones, sometimes found in the fragic horizon, probably slid down-slope when soil thawing was taking place.



Figure 29. Deep gully erosion in Wither hill soils. Larger stones are commonly present in the lower loess and their random distribution and orientation, with the long axis generally directed down slope, suggests that they have been moved down slope by solifluction.





Figure 30. Deep gully erosion in Wither hill soil from a site towards the upper part of the valley side close to a nearby ridge. The gravelly material forming a scree-type layer, thickens up-slope and has probably accumulated as a result of frost action on a nearby bare eroding ridge crest during cold glacial climate times. The fragic horizon has prominent layers that dip down-slope.



Figure 31. Soil cracks extending from the surface to the deep subsoil where tunnels have formed in the underlying highly dispersive material. Many existing cracks have probably formed due to instability caused by undercutting.





Figure 32. Enlargement of a subsurface cavern below a conduit above with partial collapse of the fragic horizon.



Figure 33. A piping channel forming below the fragic horizon in the dispersible clay loam, below a crack.





Figure 34. Roof collapse into an under-runner in a Wither hill soil.



Figure 35. Expansion of erosion by the coalescence of neighbouring gullies to form a single large eroded area. The dissolution channel to the left of the auger has formed in the dispersible silty clay horizon and not in the horizon above the fragic horizon.