



Geology Sheet 9

Limestone Terraces; giant steps in the Burren.



One of the most distinctive features of the Burren is the stepped, terraced hillsides (Fig. 1). These terraces formed because the limestone layers are actually separated by thin bands of mudstone (clay) that are 15 - 50 cm thick. It can be difficult to see the bands of mudstone in the hills and valleys of the Burren as they are very soft and are easily washed away by rainwater. These mudstone layers are often visible in places where the rock has been broken recently (Fig. 2).



Fig.1



Fig.2

Water gradually washes away the layers of mudstone, eating into the hillside, leaving the layer of limestone on top of the mudstone unsupported (Fig. 4). Eventually, so much of the mudstone layer is washed away that the overlying layer of limestone on top becomes unstable and eventually collapses under its own weight. The presence of numerous vertical fissures in the limestone adds to the instability (Fig.3) This often leaves piles of loose blocks and boulders at the base of the terrace (Fig.4). During glacial periods large moving ice sheets would have 'plucked' the loosened rock along the terrace edges and carried it some distance.



Fig. 3



Fig. 4

