



Geology Sheet 4

The Geological Map of the Burren and Cliffs of Moher Geopark



There are three major types of rock in North Clare: limestones, shales, and siltstone/sandstone. This geological map shows the distribution of these rock types. The layers of rock are tilted gently to the south so older rocks are exposed in the north and progressively younger rocks to the south.



Fig. 1 Basic geological map of North Clare

| Rock type | Composed of | Size of grains | Mechanical strength | Dissolves in rainwater? |
|--------------------------------|--|--|------------------------------|-------------------------|
| <i>Limestone</i> | calcium carbonate (CaCO ₃) | coarse grained (grains visible with naked eye) | strong (good building stone) | Yes |
| <i>Shale</i> | clay (FeMgAlSiO ₃) | very fine grained (grains visible only with microscope) | weak (poor building stone) | No |
| <i>Siltstone and sandstone</i> | silica (SiO ₂) | medium to coarse grained (grains visible with lens or eye) | strong (good building stone) | No |

This table summarises the main features of each of these rock types.

The column on the left shows a cross-section of the rocks, i.e. what you would see if you were to dig through the rocks. The siltstones, sandstones and shales once covered the Burren limestone but have been removed by millions of years of erosion.

