



The limestones of the Burren have been fractured. These fractures are visible today throughout the limestone and are called joints; where they have been widened by dissolution they are called grikes (see next page). After the limestones were laid down, they were buried approx. 2.5 km below the Earth's surface. While they were buried, there was a mountain building event (called an orogeny) to the south in Europe, where two plates of the Earth's crust collided. The stresses set up during this event travelled northwards through the Earth's crust and compressed the

limestones of the Burren. As a result, many microscopic joints, (fractures), formed in the limestone. These joints are aligned roughly N-S (actually 5° - 185°). They are the main joint set in the Burren: they pass through the entire thickness of the limestone sequence, and across the entire area.



Fig. 1. When two continents collide stress builds up in the rocks.

Other minor joints in the limestone are oriented in different directions. They tend to be shorter than the N-S joints. These minor joints formed as the rock overlying the limestone was removed. As the weight of almost 2km of rock was removed a lot of pressure was released and these stress release fractures formed.



Fig. 2. Weathered joints in the limestone

