



## Geology Sheet 17

### Sandstones and siltstones; the formation of a Delta.



The sandstones and siltstones of North Clare were laid down in a massive delta, similar to the Mississippi delta today. Before the delta appeared, the sea that covered North Clare was deep, dark and quiet. There was an ancient continent some 100 - 200 km to the SW of the marine basin where the Burren's rocks formed (Fig. 1), with rivers flowing over its surface. Where these rivers flowed into the sea, they deposited sediment (sand, silt and clay) into the sea, forming

deltas. One of these deltas moved into the area of what is now North Clare. This delta is now exposed on the coast from the Cliffs of Moher to Loop Head and covered an area of several hundred square kilometres.

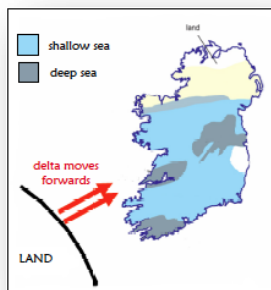


Fig.1. A large delta developed 320 million years ago

Fig.2 Wave ripples indicate shallow water

The siltstones and sandstones were laid down during floods. In between the floods, the sea floor was relatively calm, allowing ripples to form on the sea floor (Fig. 2)

just like the ripples you can see on a beach. During these quiet periods, organisms lived in and on the sea floor.

These organisms left many sinuous trails which are preserved in the famous 'Moher Flags' (Fig. 3). The animal which left these trails has not been preserved which suggests it may have been soft-bodied, with no hard shell.

