

FGS Field Trip to Ireland, 12 -27 May, 2001



Thirty members of the Society went on the 15 day trip to Ireland, visiting sites of geological interest in the north and midland counties of the island. Ireland is a treasure-trove for the geologist and several of the sites visited were well known landmarks for the tourist, the first being the Giant's Causeway in Co. Antrim.

Dr Paul Lyle, an expert on the basaltic lavas that erupted along a line crossing NE Ireland, led the visit to the Causeway. When the North Atlantic opened up some 60 million years ago, one of the resulting lava flows was dammed in a fresh water valley where it slowly cooled to form the characteristic hexagonal columns of the causeway (see photo).

The last two days in Northern Ireland were spent in the counties of Tyrone and Fermanagh, where two particular features were studied, one being the effect of the retreat of the last ice-age on the Sperrin Mountains, and the other the Marble arch cave formation through which the River Cladagh flows.

On day seven, the party crossed into Eire, initially staying three nights in Donegal. This was the base for visits to the Blue Stack Mountains, a granite mass formed when the ancient Iapetus Ocean closed, and to a newly opened Eco-centre which had excellent displays not only of the effect of a 400 million year old meteorite impact on the local geology but also on sources of renewable energy.

After Donegal, the group travelled south-west through Sligo and past the Ox Mountains to stay two nights in Westport in the County of Mayo. From here, visits were made to see many islets in Clew Bay, all of drumlin origin, and the holy mountain of Croagh Patrick, where the Saint is reputed to have fasted for 40 days and which is now a major pilgrimage site.



From Westport and onto Galway, visiting an old Connemara Marble quarry en-route, where samples of the greenish marble were collected. On the southern side of Galway Bay is The Burren, over 100 square miles of limestone pavement where the jointing in the limestone beds has been progressively enlarged by the dissolving effects of

groundwater to form ideal sheltered habitats for a marvellous variety of flora and fauna. Ancient man also lived on the top of The Burren, leaving behind an array of dolmens and other ancient burial sites. Another very impressive site

visited was The Cliffs of Moher, sandstone/shale/siltstone cliffs that rise some 700 feet sheer out of the Atlantic ocean (see photo).

Onto Athlone, where visits were made to two contrasting lead/zinc mines. The first, at Tynagh, was an open-cast mine which closed some years back to leave an ugly scar on the landscape; the second, the Galmoy Mine, is an underground operation capable of producing 150,000 tonnes of concentrates per annum, with little or no evidence of its operation at the surface other than a few well camouflaged buildings.

En-route from Athlone to Dublin the group visited The Blackwater Bog, a vast peat bog covering an area of over 8000 hectares and producing fuel to power a nearby power station as well as peat for domestic use. The raised bog is traversed by a light railway and a guide explained the various processes involved in the extraction of peat. When the peat is worked out over the next 20 years, the area will be forested.

The above is an abbreviated version of an article written by Peter Cotton for the 'Farnham Herald'.