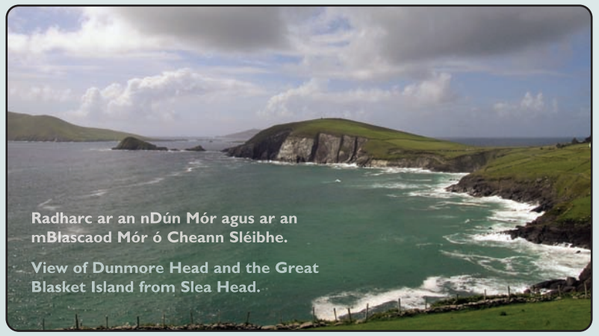
Geolaíocht Chorca Dhuibhne cois bóthair

The Roadside Geology of West Kerry

An Chomhairle Oidhreachta
The Heritage Council

Carraigeacha ag Ceann Sléibhe agus na Blascaoidí

Slea Head & Blasket Islands rocks



Radharc ar an nDún Mór agus ar an mBlascaod Mór ó Cheann Sléibhe.

View of Dunmore Head and the Great Blasket Island from Slea Head.

Much of the western end of the Dingle Peninsula is composed of terrestrial sediments such as conglomerate and fine to coarse-grained sandstone that make up the Dingle Group. These were deposited in river systems during the late Silurian and early Devonian. There is a distinctive gap between them and the overlying Old Red Sandstone best seen at Bull's Head. While Inishvickillane is made of older volcanic rocks the remaining Blasket Islands are composed of Dingle Group rocks.

Tá cuid mhaith d'iarthair Leithinis Corca Dhuibhne comhdhéanta as dríodair domhanda mar chomhcheirtleán agus gaineamhchloch garbhghráinneach as atá Grúpa an Daingin déánta. Bhíodar siúd fágtha in abhainnchórais le linn tréimhsí an Siolúraigh agus an Deavónaigh. Tá bearna éagsúil eadarthu agus is fearr atá an Sean-Ghaineamhchloch Rua le feiscint ag Ceann an Daimh. Cé go bhfuil Inis Mhic Uileáin comhdhéanta as carraigeacha bolcánacha níos sinne tá na Blascaodaí eile comhdhéanta as carraigeacha i nGrúpa an Daingin.

Comhcheirtleáin (thuas) agus gaineamhchlocha (thíos) de Ghrúpa an Daingin ag Ceann Sléibhe. Is dríodair ghairbhghráin-neacha iad comhcheirtleáin a sil-leagadh mar fheain ghláracha nó i leabacha aibhneacha i ndiaidh tuilte. Leagadh gaineamhchlocha síos mar ghuairí in aibhneacha srutharlaigh ag gluaiseacht soir aniar.

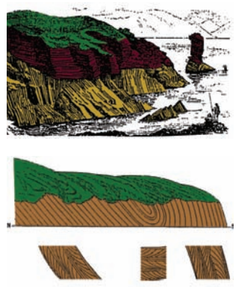
Conglomerates (above) and sandstones (below) of the Dingle Group at Slea Head. Conglomerates are coarse-grained sediments containing cobbles that were often deposited as alluvial fans or in riverbeds after flooding. The sandstones were laid down as sandbars in braided rivers that flowed from west to east.

EACHTRAÍ GEOLAÍOCHTA SUNTASACHA

Léiríonn struchtúir áirithe i nGrúpa an Daingin agus dríodair níos óige cad a tharla dóibh san am atá thart.

NEAMH-CHOMHFHOIRMEACHT Ag Ceann an Daimh (barr ar dheis) tá carraigeacha Ghrúpa an Daingin (crón) treoshuite go hingearach ag mór-chumhscú talún, ansan creimthe agus níos déanaí sil-leagadh Sean-Ghaineamhchloch Rua (corcra) ar barr. Tá an bhearna (an charraig chreimthe atá in easnamh) léirithe ag line ar a tugtar neamh-chomhfhoirmeacht.

CHUN AN TAOBH CEART AR BARR CARRAIGEACHA A THUISCINT Is téarma é 'An Taobh Ceart ar Barr' a léiríonn treoshuíomh shil-leagan carraigeacha. Uaireanta tá sé deacair a thuiscint an raibh carraigeacha casta bun os cionn mar atá i sraith fhillte. In 1856 thaispeáin Patrick Ganly ó Bhaile Átha Cliath ag Cuas na gColúr in aice Ceann Sléibhe (ar chlé) gur féidir an cheist seo a shárú le cisil ghaineamhchloiche a léiríonn tras-srathú éagsúil. Léirigh treoshuíomh an tras-srathú go raibh gaineamhchlocha Ghrúpa an Daingin fillte isteach i bhfilleadh U-chruthach (nó cuaschlaonasach). Taispeánann an léaráid thíos sa lár an bun-treoshuíomh nuair a sil-leagadh an dríodar. Taispeánann iad siúd ar chlé agus ar dheis na cisil fhillte ón mbunsuíomh.



REVEALING GEOLOGICAL EVENTS

Some structures in the Dingle Group and younger sediments can indicate what happened to them in the past.

UNCONFORMITY At Bull's Head (top left) the Dingle Group rocks (coloured tan) have been orientated vertically by major earth-movements, then eroded, and later Old Red Sandstone (purple) has been deposited on top. The gap (and missing eroded rock) between the two units is represented by a line called an unconformity.

TELLING THE RIGHT WAY-UP ON ROCKS 'Way-up' is a term to indicate the original orientation of rocks when deposited. Sometimes it is difficult to determine if rocks have been overturned as in a folded sequences. In 1856 Patrick Ganly of Dublin showed at Coosnagloor near Slea Head (bottom left) that sandstone beds showing distinctive cross-stratification could be used to solve this problem. The orientation of the cross-stratification demonstrated to him that the sandstones of the Dingle Group had been folded into a U-shaped (or synclinal) fold. The diagram in the lower middle shows the original orientation when the sediment was deposited. Those on the left and right show the beds folded from the original.

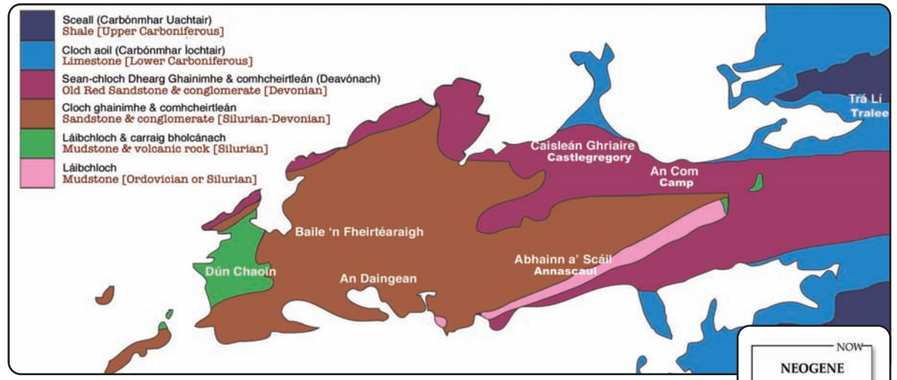
Gallarus Oratory

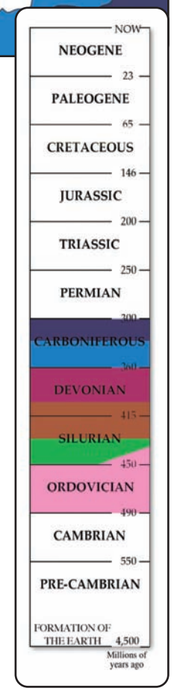
A 6th to 8th century church built of local purple-coloured coarse grained conglomerates and sandstones of the Dingle Group. No mortar was used in the construction of this corbelled oratory which is the finest in the country.

Aireagal Ghallarais Séipéilín ón 6ú go dtí an 8ú céad tógtha le comhcheirtleáin gharbhghráinneacha corcra áitiúla agus gaineamhchlocha de Ghrúpa an Daingin. Ní raibh moirtéal ar bith in úsáid i dtógaint an aireagail choirbéalta seo arb é an ceann is fearr sa tír.

Stair na Geolaíochta i gCorca Dhuibhne

Geological History of West Kerry





Le linn thréimhse an Ordaivísigh agus tréimhse an tSiolúraigh, is laisteas de mheánchiorcal an domhain a bhí Éire, faoin bhfarraige idir dhá mhór-roinn. Bhí pluda agus gaineamh á leagadh síos ann, gur deineadh díobh na carraigeacha atá le feiscint anois gairid d'Abhainn an Scáil. Le linn an tSiolúraigh, bhí bolcáin ag pléascadh leis an laibhe agus leis an luaithreach atá le fáil inniu ag Ceann Sratha. Théadh ainmhithe i ngreim i ndríodar láibe agus tá siad le feiscint inniu ann mar iontaisithe nó fosailí gairid do Dhún Chaoin agus ar Chnoc Chathair Chonraoi. Dríodar gainimhe a leagadh síos ina dhiaidh sin a chruthaigh na clocha gainimhe i n-aice leis an nDaingean agus ag Ceann Sléibhe.

Faoi thréimhse an Deavónaigh, bhí an fharraige dúnta ar fad, rud a chruthaigh mór-roinn mhór talún le fásaigh ann. Deineadh Sean-chloch Dhearg Ghainimhe den ngaineamh, mar atá i ndrom Shliabh Mis, agus den ndríodar garbh, deineadh na carraigeacha ar a dtugtar comhcheirtleáin, atá le feiscint inniu ag Loch Slat agus ag Inse.

Ag tús an tréimhse Carbónmhar, bhí an talamh faoi bhun farraige tanaí trópaiceach agus bhí an coiréal agus an t-iasc sliogánach ag maireachtaint go ráthmhar ann. Tá a rian súd caomhnaithe sna clocha aoil sna Machairí.

Le dhá mhilliún bliain anuas go dtí deich míle bliain ó shin, bhíodh comanna á gcruthú ar thaobh na gcnoc ag an oighear; is minic a bhíonn locha iontu inniu. Ritheadh sruth an oighir le fánaidh trí na gleannta, agus de réir mar a leá sé, leagadh síos cré na mbollán le mórán saghsanna cloch tríd.

During the Ordovician and Silurian Ireland was south of the equator and under an ocean between two continents. Mud and sand deposited into it eventually became the rocks seen near Annascaul. In the Silurian, volcanic islands erupted lavas and ash now found at Clogher Head. Muddy sediments trapped animals today preserved as fossils near Dún Chaoin and on Caherconree Mountain. Younger, sandy sediments produced the sandstones near An Daingean and Slea Head.

By the Devonian, the ocean had disappeared, forming a large continent with deserts. The sand formed Old Red Sandstone, the backbone of the Slieve Mish Mountains, while coarser sediments produced rocks called conglomerates, seen now at Lough Slat and at Inch.

At the beginning of the Carboniferous period the land was flooded by shallow tropical seas where shellfish and corals thrived. These are preserved in the limestones on the Magharees.

During the last 2 million years to 10,000 years ago, ice on mountainsides formed depressions called corries, many of which now contain lakes. Glaciers moved downslope along river valleys, and when they melted boulder clay containing many different rock types was deposited.

Radharc ón mBlascaod Mór ar Dhún Mór (sa lár) agus ar Cheann Sléibhe (ar dheis). Greanadh adhmaid ón 19ú céad ag George Victor Du Noyer, geolaí le Suirbhéireacht Gheolaíochta Éireann (le cead Shuirbhéireacht Gheolaíochta Éireann).

Dunmore Head (centre) and Slea Head (right) viewed from the Great Blasket Island. 19th century woodcut by George Victor Du Noyer, geologist with the Geological Survey of Ireland (courtesy Geological Survey of Ireland)

Text and graphics by Patrick Wyse Jackson (Trinity College, Dublin)