

The Roadside Geology of the Dingle Peninsula



An Chomhairle Oidhreachta
The Heritage Council

Fásach Ársa ag Bá Chill Mhuire Ancient Deserts at Kilmurry Bay

Is mór an díol suime é Bá Chill Mhuire ar dhá chúis. Tá duimhche atá 380 milliún bliain d'aois le feiscint anseo agus iad caomhnaithe ina gclocha sna failteacha. Ina theannta sin, tá ceann de na cladaigh stoirme is fearr i nÉirinn anseo.

I dtéimhse an Deavónaigh, bhí aibhnteacha ag rith aneas trí fhásach mór, ag iompar dríodar garbh agus gaineamh leo. Sa lá atá inniu ann, tá comhcheirtleán déanta den ábhar garbh, mar atá le feiscint ag Inse. An ghaineamh a bhí sna duimhche cuaracha sa bhfásach, deineadh Cloch Ghainimhe Chill Mhuire de, atá éadrom buí. Is aonad é seo den Sean-chloch Dhearg Ghainimhe, a sholáthraigh cuid mhaith den ábhar atá i Sliabh Mis agus sna cnoic sall uaidh i nUíbh Ráthach.

Tá blocanna de chlocha gainimhe maolaithe ag caitheamh na dtiontracha agus ó bheith ag bualadh i gcoinne a chéile. Tá siad caite aníos ar chúl na trá ag na stoirmeacha, mar a dheineann siad iomaire cloch ar a dtugtar cladaigh stoirme.

Kilmurry Bay is of great geological interest for two main reasons. Here 380 million year old fossilised sand dunes can be seen in the cliffs, and it contains one of the finest storm beaches in Ireland.

In the Devonian period rivers flowed south across a large desert, and carried sands and coarse sediments. Today the coarser material forms conglomerates now seen at Inch while the sand that formed crescent-shaped sand dunes in the desert makes up the pale yellow coloured Kilmurry Sandstone. This is a unit of the Old Red Sandstone that forms much of the Slieve Mish mountains and those seen on the Iveragh Peninsula opposite.

Blocks of sandstone have become rounded by the action of the waves and from knocking against each other. Storms have thrown them towards the back of the beach where they form a ridge called a storm beach.



Duimhche caomhnaithe ina gclocha, de Chloch Ghainimhe Chill Mhuire (tréimhse an Deavónaigh), a léiríonn srathanna suaithinseacha trasánacha.

Fossil sand dunes of the Kilmurry Sandstone (Devonian) showing distinctive herring-bone layering or cross-stratification.



Éasc nó scoilt trí na carraigeacha ag Bá na Mine Airde. Tá an tSean-chloch Dhearg Ghainimhe luite anuas ar charraigeacha dríodra, atá níos críonna ná iad agus ar dhath níos éadroime.

Fault through rocks at Minard Bay. The Old Red Sandstone lies on top of older paler sedimentary rocks.



Cladaigh Stoirme de bhulláin mhóra rabhnáite de Chloch Ghainimhe Chill Mhuire.

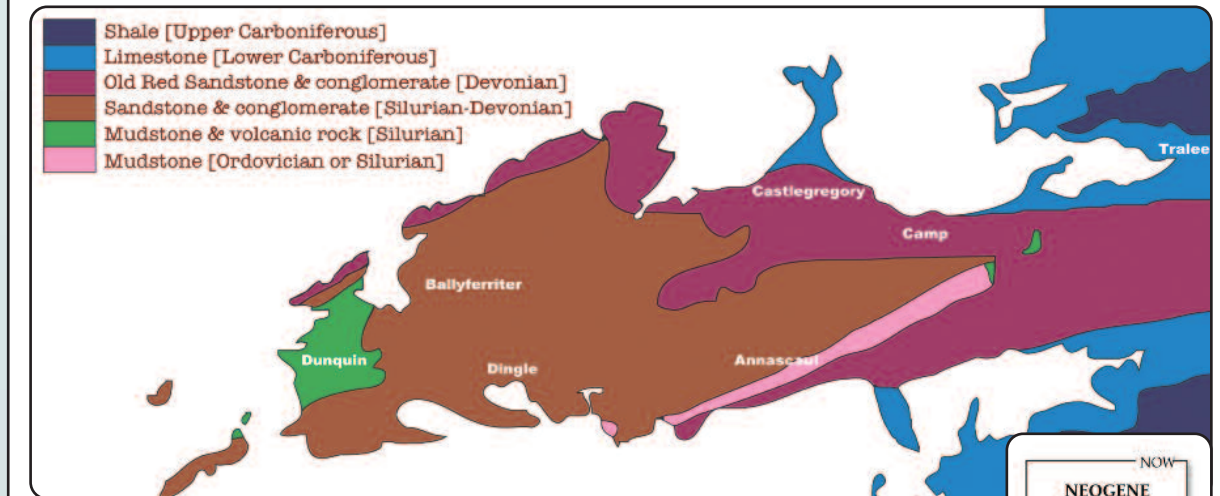
Storm Beach composed of large rounded boulders of Kilmurry Sandstone.



Caisleán na Mine Airde, tús ón 16ú haois a tógadh le Cloch Ghainimhe Chill Mhuire. Thug arm Chromail faoi sa bhliain 1650 agus dheineadar díobháil don struchtúr.

Minard Castle, a 16th century tower house built of Kilmurry Sandstone. It was attacked by Cromwell's army in 1650 and structurally damaged.

Dáileadh na gcomanna i gCorca Dhuibhne Geological History of the Dingle Peninsula



Le linn thréimhse an Ordaivísigh agus tréimhse an tSiolúraigh, is laistea de mheánchiorcal an domhain a bhí Éire, faoi bhun uisce na farraige idir dhá mhór-roinn talún. 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 luathreach atá le fáil inniu ag Ceann Sratha. Théadh ainmhithe i ngreim sa dríodar agus sa phludaigh 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-áice leis an nDaingean agus ag Ceann Sléibhe.

Faoi thréimhse an Deavónaigh, bhí an fharrage dúnta ar fad, rud a chruthaigh mór-roinn mhór talún le fásaigh ann. Deineadh Sean-chloch Dhearg Ghainimhe den ngainimh, mar atá i ndrom Shliabh Mis, agus den ndríodar garbh, deineadh na carraigeacha ar a dtugtar comhcheirtleán, 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 síd caomhnaithe sna clocha aoil sna Machairí.

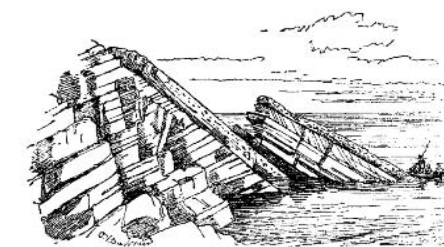
Le dhá mhíliún bliain anuas go dtí deich míle bliain ó shin, bhíodh comanna á gcruthú ar thaobh na gcnoc ag an oighear; is minic a bhíodh locha iontu inniu. Ritheadh sruth an oighir le fánaidh trí na gleannta, agus do réir mar a leaghadar, leagadar síos cré na mbollán le mórán sórtanna cloch tríd.

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 Dunquin and on Caherconree Mountain. Younger, sandy sediments produced the sandstones near Dingle and Sleah Head.

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

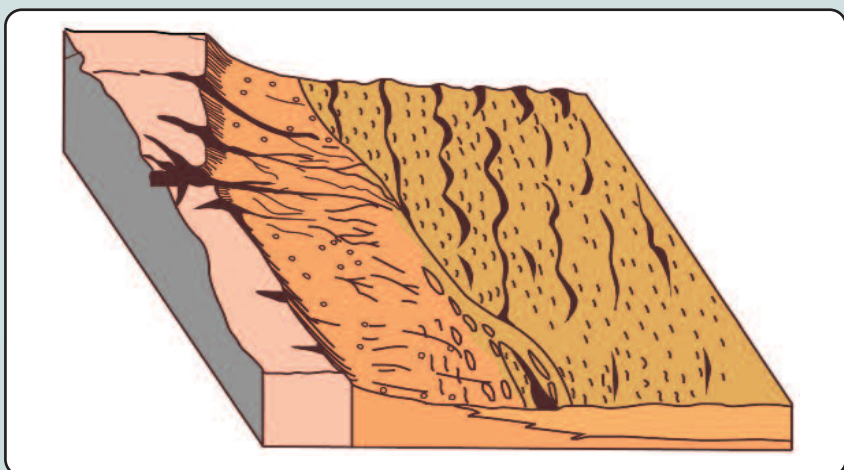
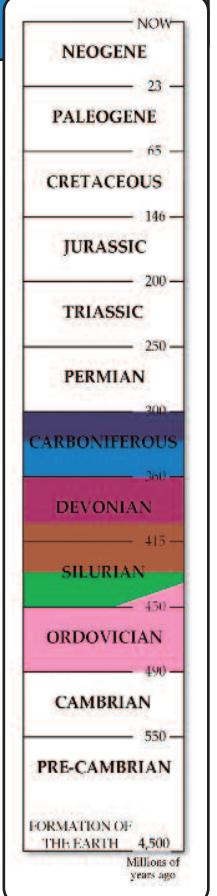
At the beginning of the Carboniferous period the land was flooded by shallow tropical seas where shellfish and corals thrived. These are preserved in the limestones on the Magharees.

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.



Carraigeacha fiar-sceabhacha de Chomhcheirtleán Inse agus de Chloch Ghainimhe Chill Mhuire (ar dheis) luite anuas ar chlocha gainimhe atá níos críonna ná iad (ar chlé). Greanadh adhmaid ón 19ú haois de chuid George Victor du Noyer, geolaí le Suirbhéireacht Gheolaíochta na hÉireann (le caoinchead Shuirbhéireacht Gheolaíochta na hÉireann)

Tilted rocks of Inch Conglomerate and Kilmurry Sandstone (right) sitting on top of older sandstones (left). 19th century woodcut by George Du Noyer (courtesy of the Geological Survey of Ireland).



Léaráid de cheantar Chill Mhuire le linn thréimhse an Deavónaigh. Tá na carraigeacha críonna bándearga buailte suas le dríodar óg a thug na tuilte aduaidh, agus éasc nó scoilt eatarthu.

Diagram showing the Kilmurry region during the Devonian period. The older pink rocks are faulted against the younger sediments carried from the north by floods.