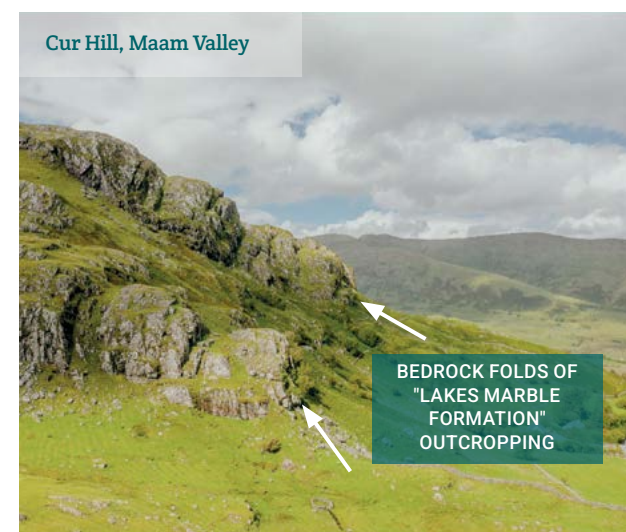


JCWL Geopark Project Fact Sheet

A UNESCO Global Geopark is an area with sites and landscapes of international geological significance and its status adds no further planning regulations to those already in place

Highlights

- ▶ A geological story of over 700 Ma told through the rocks and landscape with the best complete record of opening and closing of the Iapetus Ocean.
- ▶ Great geodiversity of each rock type (igneous, sedimentary and metamorphic), a rich fossil record and evidence of multiple folding and faulting events in the uplands.
- ▶ A vast and diverse glaciological landscape throughout the region that includes many U-shaped valleys, corries and drumlins and Killary Harbour - Ireland's only fjord.
- ▶ Important karst and epikarst landscapes (around Loughs Carra, Mask and Corrib) linked to limestone bedrock; Cong isthmus is one of the world's fastest flowing spring complex and has multiple cave systems.
- ▶ Lough Carra - a unique marl lake and biodiversity hotspot boasting rare flora and fauna.



Beyond Geology

- ▶ Diverse habitats; blanket bog, fertile grasslands, vast woodlands, limestone pavements, and many lakes and rivers.
- ▶ These habitats are home to a range of mammals, birds and plant life.
- ▶ Managed lakes and rivers for salmon and World-Cup trout.
- ▶ Evidence of human presence 10,000 years ago.
- ▶ Neolithic ritual landscapes: stone tombs, stone circles, and rock art.
- ▶ Strong associations with many Irish Saints (St Patrick, St Brendan, etc).
- ▶ Stone castles and settlements from the Middle Ages.
- ▶ Development of large estates such as Ashford Castle.
- ▶ Strong tradition of music, storytelling, crafts and food production.

Ma – MILLION YEARS AGO
DATING IS BASED ON CURRENT KNOWLEDGE

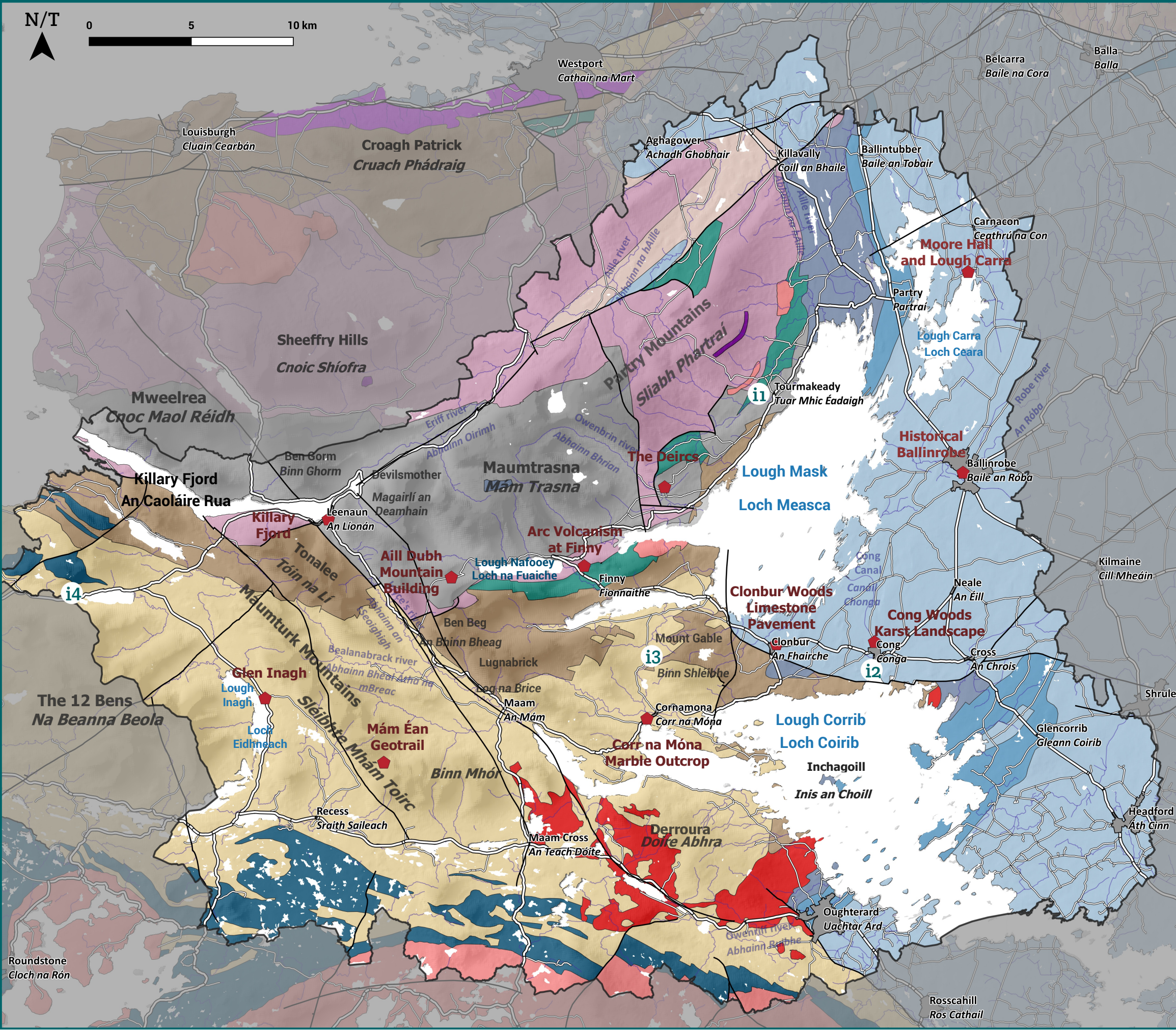
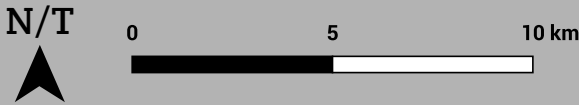
The Geological Story in 10 Steps

Where to explore

SITES OF INTERESTS*

1	700 Ma	PRECAMBRIAN	Supercontinent of Rodinia, starts to rift (split apart); NW Ireland becomes part of Laurentia, and SE Ireland part of Gondwana. Deposition of sediments on the floor of the new Iapetus Ocean separating the two. Both are located in the Southern Hemisphere.	▶ Corr na Móna* ▶ Glen Inagh* ▶ Maam Valley ▶ Maam Cross
2	485 Ma	ORDOVICIAN	Arc volcanism and deposition of sediments associated with subduction during early closure of the Iapetus Ocean.	▶ Finny* ▶ Tourmakeady* ▶ Aill Dubh* ▶ The Deircs*
3	475 - 463 Ma	ORDOVICIAN	Collision of continents with metamorphism (transformation of existing rocks; e.g. limestone into marble), magmatic arc, regional deformation (folding) and relocation of Connemara. Formation of a major mountain range.	▶ Corr na Móna* ▶ Glen Inagh* ▶ Máam Éan* ▶ Maam Cross
4	425 Ma	SILURIAN	Further sediments deposited flat on top of older, deformed (folded) rocks. NW and SE Ireland came together with the closing of the Iapetus Ocean; The island of Ireland is now whole.	▶ Killary Fjord* ▶ Finny* ▶ Aill Dubh* ▶ Cong* ▶ Maam Valley
5	400 Ma	DEVONIAN	Intrusion of Galway granite and occurrence of strike-slip faulting. Major mountain range is being eroded.	▶ Maam Valley ▶ Galway Bay
6	350 Ma	CARBONIFEROUS	Deposition of limestone in warm, tropical, shallow seas. Ireland is at the Equator.	▶ Lough Carra* ▶ Ballinrobe* ▶ Clonbur* ▶ Cong*
7	65 Ma	PALAEOGENE	Opening of Atlantic Ocean and uplift of mountains we see today. Ireland is at its current latitude.	▶ Glen Inagh* ▶ The Deircs* ▶ Killary Fjord*
8	35 Ma	PALAEOGENE	Karst landscapes start to develop where limestone outcrops.	▶ Cong* ▶ Clonbur* ▶ Lough Carra* ▶ Killawalla
9	1 Ma	QUATERNARY	Multiple ice ages shape our modern landscape.	▶ Everywhere (Killary Fjord*, The Deircs*, etc)
10	0.01 Ma	HOLOCENE	Arrival of humans in the area.	▶ Everywhere

Geological Map of Joyce Country and Western Lakes aspiring geopark region
Mapa Geolaíochta den réigiún den gheopháirc (roimh aitheantas)
Dhúiche Sheoigheach agus Lochanna an Iarthair



Legend/Eochair Eolais

- Lower Carboniferous (Viséan) sandstone, mudstone & evaporite
Gaíneamhchloch, láibchloch agus gailít ón Treimhse Charbónmhar íochtarach (Viséach)
- Lower Carboniferous (Viséan) limestone & calcareous mudstone
Aolchloch agus láibchloch chailcreach ón Treimhse Charbónmhar íochtarach (Viséach)
- Lower Carboniferous (Tournaisian) limestone
Aolchloch ón Treimhse Charbónmhar íochtarach (Thúrnaiseach)
- Lower Carboniferous (Tournaisian) sandstone, mudstone, limestone
Gaíneamhchloch, láibchloch, aolchloch ón Treimhse Charbónmhar íochtarach (Thúrnaiseach)
- Silurian sandstone, siltstone, conglomerate
Gaíneamhchloch, siltít, comhcheirtleán Siolúrach
- Middle to Upper Ordovician slate, sandstone, greywacke, conglomerate
Slinn, gaíneamhchloch, gréabhaca, comhcheirtleán ón Treimhse Ordaiviseach Láir go hUachtarach
- Lower to Middle Ordovician slate, sandstone, greywacke, conglomerate
Slinn, gaíneamhchloch, gréabhaca, comhcheirtleán ón Treimhse Ordaiviseach íochtarach go Láir
- Ordovician volcanic rocks
Carraigeacha bolcánacha Ordaiviseacha
- Precambrian metamorphic rocks - Dalradian quartzite, marble, schist
Carraigeacha meiteamorfach ón Réamhchaimbriach - Dáiriadach grianchloichít, marmar, siosta

Igneous Intrusions/Bruth-Ionsánna

- Palaeogene gabbro, dolerite
Gabró, dolairít Pailéigéineacha
- Siluro-Devonian granite
Eibhear Shiolúrach-Deavónach
- Lower Palaeozoic gabbro, diorite
Gabró, dióirít ón Tréimhse Phailéasóchíochtarach
- Ordovician granitic rocks
Carraigeacha eibhreacha Ordaiviseacha

Other/Eile

- Fault
Éasc
- Rivers
Abhainn
- Geopark boundary
Fóir an Gheopháirc
- Geosites
Geoshuíomhanna
- Information Centres
Ionaid Eolais
- 1: Geopark Office / Oifig na Geopháirce
- 2: Cong Tourist Office / Oifig Turasoíreachta Chonga
- 3: Comharchumann Dhúiche Sheoigheach (CDS) Teo
- 4: Kylemore Abbey / Mainistir na Coille Móire

Scale/Scála 1:135000
Projection/Teilgean: Irish Transverse Mercator

Geological data from Geological Survey Ireland
Sonraí geolaíochta as Suirbhíreach Gheolaíochta Éireann

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