

Exploring the rocky wonders of Laois and Offaly

This is an exceptional book. In fact, it is one of the best that has ever been published here on geology or the Irish landscape, and in richness of content this 400 page book deserves to share shelf space with classics like Kane's *Industrial Resources*, or Mitchell's *Irish Landscape*.

Although the book's focus is on Laois and Offaly, the author, John Feehan, strays far and wide and what he has to say about these counties often has a bearing on what we find in other areas of Ireland. For example, many of the houses that line the streets of Rathmines, Rathgar and Portobello in Dublin were built with bricks from Athy and Durrow, and anyone who has paused to admire the Guinness Hop Store might be interested to know that brickwork originated in the clay at Graigue, a small community outside Tullamore.

John Feehan makes lots of connections, and that's one of the reasons why delving into this book is like setting off on a journey of discovery. From the brickfields we can follow a trail back into the ice ages and beyond, and as we learn, what humans got up to, either by way of farming

or industry, was often based on what happened in the geological past.

Blue and grey late glacial clays, up to five metres deep by the River Brosna, provided the raw material for an army of brickmakers. As yellow bricks from the remote and isolated village of Pollagh became popular, there was a boom. By the end of the 19th century there were 14 brickyards in the immediate area, each producing about 5,000 bricks a day, including some extras, known as

The midland counties have been a source of iron, coal, peat, building stones, gravel and countless bricks such as these in Mountmellick.

"dog bricks" to allow for wastage. As John Feehan, who gives a very good account of how the brickmakers worked, explains, the term refers to stray dogs wandering in and spoiling un-fired bricks that had been lain out to dry.

Retreating ice had a big influence in shaping the landscape, often in ways that are not immediately obvious. The author describes how glaciers often acted as temporary dams, leaving a blanket of lake deposits behind when melt-waters drained away. On melting the moving glaciers pushed everything along in their path before dropping mounds of sand and gravel, creating the eskers that are so characteristic of the midlands. Along the

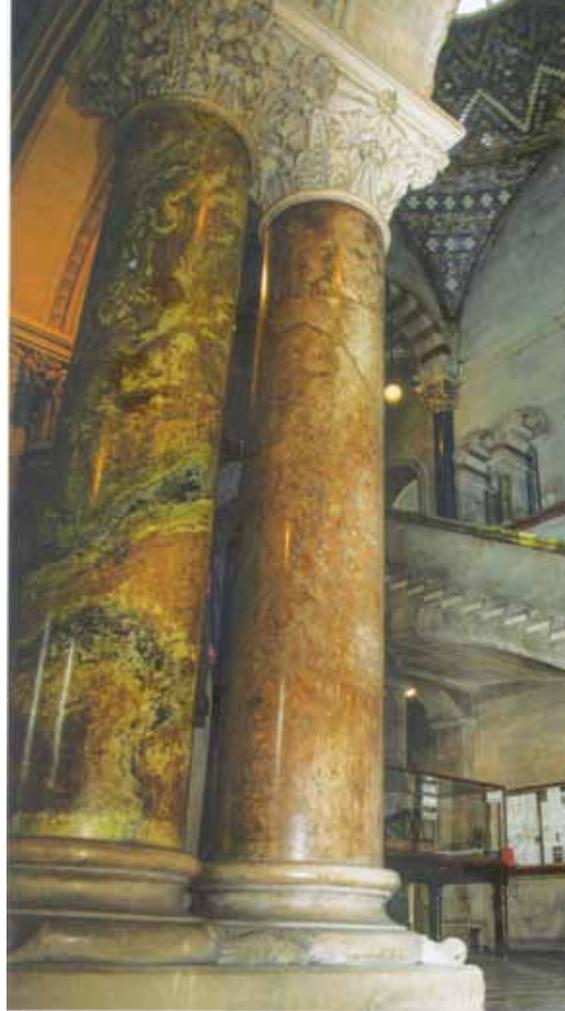
top of these ran one of Ireland's ancient highways, the Sligh Mhór, also known as the Eiscir Riada, the dividing line between two Gaelic kingdoms. Having agreed on this division, Eoghan Mór and Conn of the Hundred Battles apparently had second thoughts, resulting in the Battle of Magh Léana. John Feehan helpfully provides us with a facsimile and a translation of a 13th century manuscript, the Cath Mhuighe Léana, which tells us that there were no clear



winners, but considerable bloodshed in a clash that occurred somewhere between Tullamore and Kilbeggan.

Motorists speeding from Dublin to Galway along the N6 might not be aware that they are travelling along the same set of ridges, but as the author points out, our ancestors would have been much more aware of these natural features. Every rock, rise and spring had significance, and John Feehan, who has spent years exploring the midlands, clearly shares this sense of wonder. Far from being dismissive of the old myths, John sees them as evidence of the same sort of curiosity that drives scientists, like himself, to ask lots of questions and search for answers. We all like stories, but we also want satisfactory explanations.

John Feehan observes that many "seem to have grown immune to the wonders of the way the Earth works," yet there is now a much greater depth of knowledge to explore. Those eskers, for example, were not just produced in one uniformly chilly ice age, nor were they produced from just one ice cap. Careful mapping of the Irish eskers has revealed that they represent the flow from four different domes as the ice pushed its way through the ancient landscape, leveling limestone karst, similar to that exposed now in the Burren, and causing great wetlands to form hundreds of metres above a sea level that was considerably lower than it is today.



Pillars of polished stone from Cloney are one of the most striking features of the Museum Building at Trinity College Dublin.



Sandstone flags were quarried in a number of locations, and the richly patterned crinoidal limestone from Clorhane was in great demand for chimney pieces and ornamental slabs.



We are now living in what appears to be an extended interglacial, and over the last 2.6 million years there have been about 80 glacial cycles. We know that there were dramatic climatic changes, the evidence is there, but as John Feehan explains, we have to look far beyond Offaly and Laois to find some explanations as to why the ice advanced. For example, when great lakes in north-eastern America drained, cold waters entering the Atlantic disrupted the Gulf Stream for 1,200 years, and this caused a return to icy conditions that wiped out the herds of giant Irish deer.

A great strength of this unusually comprehensive book is that the close-up local view is always presented in a global context, and from drumlins in the midlands we are transported effortlessly out into the Solar System to learn how the Earth wobbles around an orbit that contracts and expands with a periodicity of 21,000 years.

In terms of content, this is just the tip of the iceberg, and in many ways this book, bringing us on a grand tour from the earliest origins to recent history is the next best thing to an encyclopaedia of geology.

Review: Tom Kennedy

The geology of Laois and Offaly

John Feehan

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