## Analysis confirms Ceide Fields date back 6,000 years making them older than the pyramids

## **Lorna Siggins**

You'll never beat the Irish: new research has provided further confirmation that the Ceide Fields complex in north Mayo dates back almost 6,000 years, making it older than the pyramids.

The precise age of the archaeological site, which has the oldest known field system in the world, has been hotly debated within scientific circles in recent years, with some suggestions it dates back only to the more recent Bronze Age.

When he visited the site as taoiseach in July 1990, Charles Haughey declared the blanket bog covered a monument of "world significance" that was "on a par with the younger pyramids of 2500BC or the Roman Forum". While the rest of the world was "scrambling round" searching for roots, the Irish nation could prove its pedigree as "children of the first Europeans", Haughey declared.

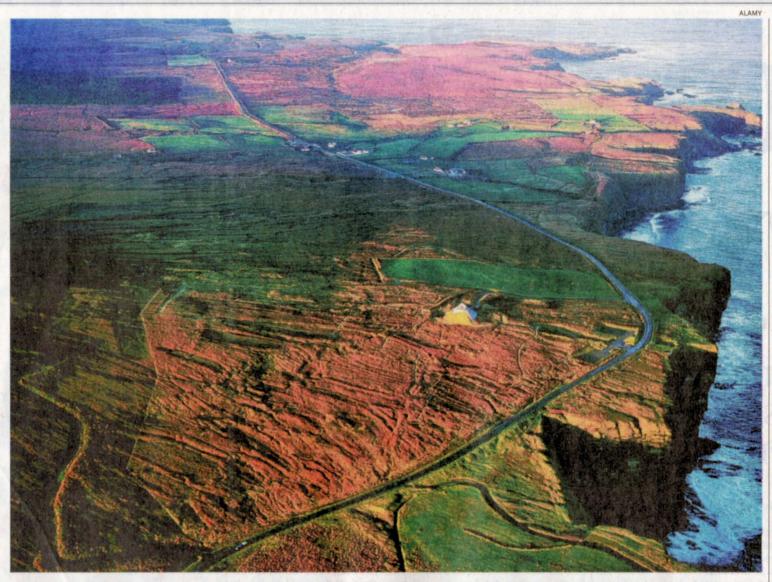
Subsequent archaeological work by Professor Seamus Caulfield proved it was one of Europe's best-preserved ancient agricultural landscapes, worked by Neolithic farmers as far back as 4000BC.

The Ceide Fields won international attention and an interpretative centre was built, but seismic shocks went through the archaeological world three years ago when Dr Andrew Whitefield, an NUI Galway (NUIG) archaeologist, questioned the complex's exact provenance. In a paper published in the European Journal of Archaeology in early 2017, he suggested the Ceide Fields site was 2,500 years younger than previously thought.

Dated organic materials, including pollen samples recovered from the slopes of Ceide hill, were not found within stone-wall boundary structures, Whitefield pointed out, so a link with farmed fields could not be proven.

Miffed, Caulfield said he was the subject of a "silent ambush". Now, though, research by pollen expert Michael O'Connell of NUIG and his palaeontologist colleagues Karen Molloy and Eneda Jennings supports Caulfield's theory.

As Whitefield had drawn on some of his work, O'Connell conducted fresh analysis of about 60 years of data from pollen and radiocarbon analysis, along with dendrochronology, or tree-ring dating, on fossilised pine timbers. Pollen preserved in lake or peat beds or fossilised in acidic soil can provide a chronology within layers of rock and sediment.



## Pollen proves Irish history is nothing to be sneezed at

This new synthesis "not only confirms the early Neolithic age of the field systems, but also leaves no doubt as to the intensity of the initial phase of Neolithic farming in north Mayo", concluded O'Connell.

He estimates that farming started in the Ceide Fields complex around 3800BC and lasted for 400 years. His research has been published in the E&G Quaternary Science Journal, published by the German Quaternary Association.

"Not only was it of long duration, but the fossil pollen evidence suggests that it was more intensive than any farming of

The precise age of the Ceide Fields site is a topic of hot debate in scientific circles

Neolithic age so far recorded in Ireland or Britain," wrote O'Connell.

The fossil pollen evidence, taken in conjunction with the large fields of up to 10 acres in size, indicated "more than likely a cattle-based farming economy", he said, but cereal was also grown.

Curiously, the intensive early Neolithic farming phase was followed by reduced activity over three centuries, and then a lull that lasted several centuries, during which farming was abandoned and the blanket bog expanded.

The NUIG researchers showed that a shift towards wetter and cooler climate did not explain the dramatic change, and they suggested that "cultural and socioeconomic factors" triggered a "considerable population decline".

O'Connell said he believed Whitefield might have misinterpreted the work on pollen analysis that he and Molloy conducted at Ceide Fields.

However, the NUIG academic "did us all a favour", O'Connell conceded, as he "raised valid questions and forced us to come back and answer him".

The expert consensus is the Egyptian pyramids were built in the space of about 85 years between 2589BC and 2504BC.

## Pollen at Ceide Fields proves Irish history is nothing to be sneezed at

Analysis confirms north Mayo system dates back 6,000 years, making it older than the pyramids

Lorna Siggins

Sunday February 16 2020, 12.01am GMT, The Sunday Times



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*Added by MO'C:* 

Above from online version of the Sunday Times (keyword: history)

https://www.thetimes.co.uk/edition/ireland/pollen-at-ceide-fields-proves-irish-history-is-nothing-to-be-sneezed-at-6m7spzfmf

O'Connell, M., Molloy, K. and Jennings, E. 2020. Long-term human impact and environmental change in mid-western Ireland, with particular reference to Céide Fields — an overview. *E&G Quaternary Science Journal*, **70**, 1–32; <a href="https://doi.org/10.5194/egqsj-70-1-2020">https://doi.org/10.5194/egqsj-70-1-2020</a>

Paper (incl. supplementary material) is available for download (free access) at: <a href="https://www.eg-quaternary-sci-j.net/69/1/2020/">https://www.eg-quaternary-sci-j.net/69/1/2020/</a>