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GWL Cluster Meeting

Thursday 18th January 2018 - 6:00 for 6:30pm

William Smith, his maps and other endeavours from a digital perspective

Presenter - Peter Wigley

The Abstract

William Smith's maps have been studied in detail by many researchers interested in Smith's place in the history of geology but few have looked at the maps in the context of modern geological information. The author has been interested in Smith's maps for the past decade and during that time has digitised a number of his maps and incorporated them into a Geographic Information System (GIS).

William Smith was fortunate to have the talented John Cary as his map maker. Cary's local surveying of town and village positions was excellent and he used much of this information on the elegant base map he produced for Smith's 1815 map.

The base map prepared by Cary for the 1815 map essentially predates the 1st Principal Triangulation. However, some of the Smith-Cary county maps were concurrent with early phases of the triangulation. Once in real world coordinates, Smith's maps can be compared with modern geological mapping. Modern technology makes it possible to drape Smith's maps on a digital terrain model and view them in 3D. These visualisations dramatically illustrate Smith's complete understanding of the principles of stratigraphy.

Smith's wonderful panoramic cross-sections have been located on his maps as have fossils from his Strata Identified publication. Recently, the Natural History Museum have made Smith's own fossils, illustrated for Smith by James Sowerby, available to the author and these are currently being incorporated into a new publication by Wigley et al called William Smith's Fossils Reunited.

These studies have been incorporated into a new website, William Smith's Maps-*Interactive*. This is a free educational resource which can be found at <http://www.strata-smith.com>

The Speaker

Peter Wigley is a Cornishman and as a child became interested in geology when searching old tin and copper mine spoil heaps for rocks and minerals. He has a BSc in Geology and a PhD in Carbonate Sedimentology, both from University College London. In 1973 he joined ERICO, a geological consulting company and worked on numerous geological projects in the North Sea, Mediterranean, Africa, Middle East and SE Asia. He left ERICO in 1991 to become an independent consultant. In 1995 he joined Lynx Information Systems Ltd, a company he jointly founded, he retired from Lynx in 2015.

He is a Board Member of AAPG-Datapages and the Director of Datapages DEO-GIS, which provides online maps and figures from all AAPG publications. In addition to voluntary work for the American Association of Petroleum Geologists, Peter has worked extensively with The Geological Society. As part of their bicentenary celebration in 2007 he helped build a spatial index of their maps, and previously worked on a scanned archive of Sir Roderick Impey Murchison's correspondence. He has received Distinguished Service Awards from both The Geological Society and AAPG. He also has a long-standing interest in William Smith's maps, in 2007 he produced a DVD his maps and is the editor of the WILLIAM SMITH'S MAPS-*Interactive* website. Currently he is working with the Natural History Museum on a publication of William Smith's fossils. Peter is also the editor of the Exploration Fabric of Africa Project (EFA). EFA is a not-for-profit online GIS of Africa containing digital geological, gravity and magnetic maps together with a wide range of other hydrocarbon-related data

Venue: It will be held at The Royal Cambrian Academy, Crown Lane, Conwy, LL32 8AN (located behind Plas Mawr) and will begin at 6:30pm promptly. Refreshments will be served from 6pm

For further information please contact us: on 01492 592425 or admin@geoscience.wales