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“Mapping of caves in Co Clare”

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The Society publishes a wide range of books and booklets on historic OS map series and its journal, *Sheetlines*, is recognised internationally for its specialist articles on Ordnance Survey-related topics.

## Mapping of caves in Co Clare, Ireland

Michael Richardson

I'm sure that many of us will have experienced the thrill of finding a copy of a particularly rare early sheet in pristine condition but maps by their very nature are made to be used and hence are often grubby, damaged or carry indications of their previous ownership and use. I believe that in many cases this can actually add to their interest (if not value) and some of the most fascinating examples in my collection are those where the previous owner is known and the use to which it was put can be identified. Amongst my collection of Irish half-inch sheets are two Ordnance Survey of Ireland 1950s reprints of sheets 7 and 14, the former with the initials CLR on the cover and the other giving (more helpfully!) the original owner's name as C L RAILTON. In the right-



hand margin of sheet 14 *Galway and Aran Islands*, (10-55 reprint, partly revised 1951) he had made a series of notes about caves in Co Clare and South West Galway which suggest that he was a caving enthusiast (figure 1). In fact, he was one of the foremost British cavers of the 1940s and 1950s, who did much to put caving, and particularly the surveying of caves, on a proper scientific footing.

Courtenaye Lewis Railton was born on 25 February 1907 in Purley, Croydon<sup>1</sup> and trained as an electrical engineer; he worked first for Metropolitan-Vickers and later for a number of companies within the Tube Investments Group, being named as the inventor on two patents; he later became an engineering consultant. In 1941 he married Marjorie Morrison in Manchester and

6. Fisher Street for boats to Moher Cliffs.

See Formoyle Road junction on River Caher (for) Alpine plants

5. Caherbullog. Pot-hole near road 60' deep 100' diam 1830 yds long. Poul-naelva large pot SE  $\frac{3}{4}$  mile from 5.

3. Disappointing swallets but cave mouth 680' plus, Poulwillin.

4. Caves along side of small river by site of old castle, Ballynalackan.

1. Devil's Punch Bowl, 3 risings, Blackwater, Ladle, Churn then to Coole Lough (underground to Kinvarra Bay, Baleen).

2. One mile S of Carran, small cave 45' pitch all mud & H<sub>2</sub>O (wild horses stabled legend).

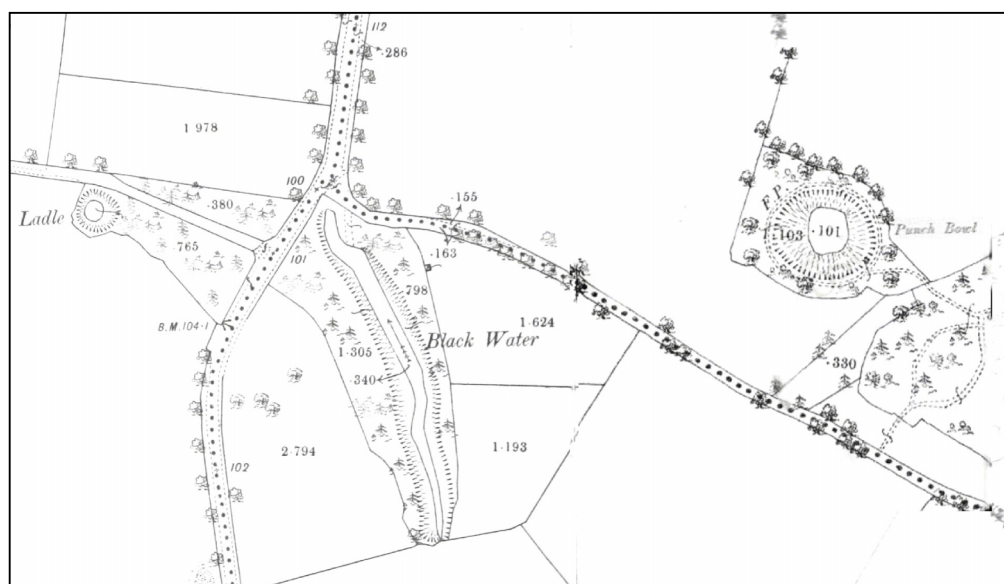
Figure 1. Railton's annotations on OSI half-inch sb. 14

<sup>1</sup> Baptismal registers for the parish of Coulsdon, [www.ancestry.co.uk](http://www.ancestry.co.uk)

she accompanied him on many of his expeditions. Railton had begun caving before the war and was active mainly in Yorkshire. When the South Wales Caving Club (SWCC) was formed in 1946 he was one of the founder members and in the same year he helped to found the Cave Research Group (CRG) whose objectives were scientific rather than recreational. Lewis Railton set the benchmark for cave survey and presentation with his survey of the Ogof Ffynnon Ddu system in the upper Swansea valley, published by the CRG in 1957.<sup>2</sup> It was during one expedition in connection with this survey that he made headlines around the world when he was trapped with his colleague Bill Little for almost 60 hours by rising flood waters.<sup>3</sup>

The SWCC newsletter No. 19 (1957)<sup>4</sup> includes a report on an expedition to Ireland by a group of club members which included Lewis and Marjorie Railton. After visiting Cork and Kerry they moved on to Clare, where their investigations are recorded in notes in the margin of his copy of OSI half-inch sheet 14, though it has not been easy to reconcile Railton's notes with some of the descriptions given in the newsletter. Only two of the six locations marked on Railton's map are referred to in the newsletter report and this describes two other caves not marked on the map. Of the six locations marked by Railton only one – the Punch Bowl south of the town of Gort – is named on the half-inch sheet and indeed there would have been no reason for the original surveyors to mark any underground features. However, I have studied the relevant Ordnance Survey of Ireland (OSI) larger scale sheets and found that virtually all of the features visited by Railton or named in the newsletter appear to be accurately mapped and, in some cases, named.

Details of the six locations follow, in each case starting with his marginal annotation in italics. Figures 2, 3 and 4 are reproduced with the permission of the Board of Trinity College, Dublin.



*1. Devil's Punch Bowl, 3 risings, Blackwater, Ladle, Churn then to Coole Lough (underground to Kinvarra Bay, Baleen).* This location is about one mile south of the town of Gort but it is not mentioned in the newsletter report. All of the named risings can be found on the 1:2500 sheets of the area.

*Figure 2. Galway sheets 128-4 and 129-1 OSI 1:2500, 1893*

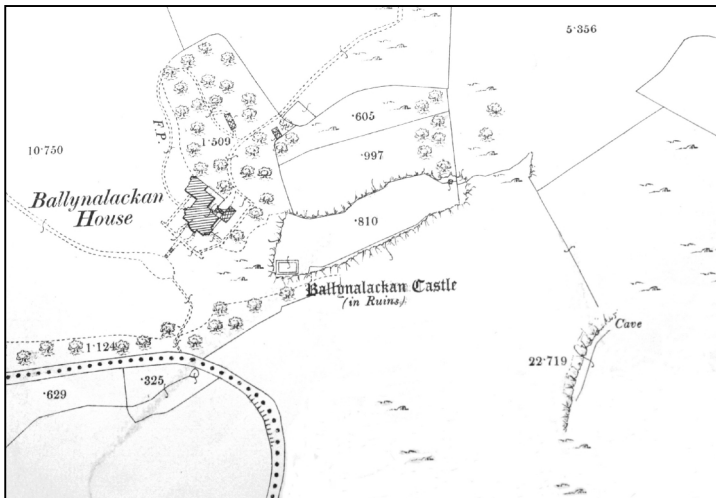
<sup>2</sup> C Lewis Railton, *The Ogof Ffynnon Ddu System*, Cave Research Group of Great Britain, 1957.

<sup>3</sup> See eg *Birmingham Daily Gazette*, 28 August 1951, page 1.

<sup>4</sup> Published online at [www.swcc.org.uk/joomla-swcc/club/newsletter](http://www.swcc.org.uk/joomla-swcc/club/newsletter)

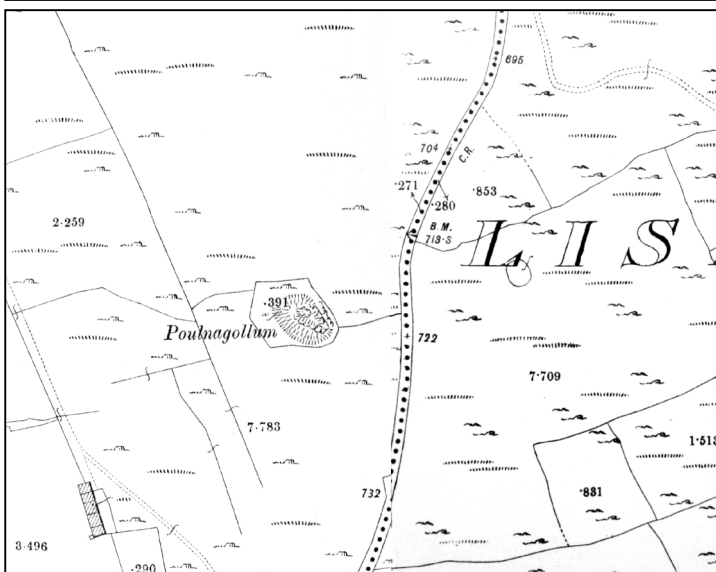
2. *One mile S of Carran, small cave 45' pitch all mud & H<sub>2</sub>O (wild horses stabled legend).* Again, there is no mention in the newsletter but this seems to be at the southern end of the Castletown river and close to the prehistoric fort named on OSI sheets as Cahersavaun. However, the legend about wild horses actually refers to a cave system at Kilcorney, 8 miles NE of Corofin. The "Cave of the Wild Horses" is a complex cave, which contains some internal potholes, often fills up with water and floods out on to the valley floor above and said to make a loud noise like horses.<sup>5</sup> It can be found on OSI 1:2500 sheet Clare 9-3 (1895).

3. *Disappointing swallets but cave mouth 680' plus, Poulwillin.* Another location not mentioned in the newsletter report. The OSI 1:2500 sheet (but not the six-inch sheet) names Poulawillin a little to the S of the location marked by Railton and also marks nearby a Spa Well (Chalybeate). This cave was first described by Bartlett in 1936.<sup>6</sup>



4. *Caves alongside of small river by site of old castle, Ballynalackan.* This small river is marked on the half-inch sheet and indeed also on the current 1:50,000 sheet 51, whilst the six-inch sheet marks 'sink' and 'rises' in several points along its route. The 1:2500 sheet marks a cave to the east of Ballynalackan Castle.

Figure 3. Clare sheet 8-2 OSI 1:2500, 1895



5. *Caherbullog. Pot-hole near road 60' deep 100' diam 1830 yds long. Poulnaelva large pot SE 3/4 mile from 5.* This refers to the cave system now known as Poulmagollum, now recognised as Ireland's largest and mentioned in the newsletter as such, being 4½ miles long. It was described as being "basically a stream passage needing no tackle ... fast progress can be made in the stream because any potholes are filled up with shale pebbles."

Figure 4. Clare sheets 4-12 and 5-9 OSI 1:2500, 1895

<sup>5</sup> Boycott et al. 'The Cave of the Wild Horses, Kilcorney, Co Clare, Ireland', *Proc. Univ. Bristol Spelaeol. Soc.*, **16**(3) (1983), 215-220.

<sup>6</sup> PN Bartlett, 'County Clare — A Brief Diary', *Yorkshire Ramblers' Club Journal*, 6 (22) (1936), 329-331. Leeds: YRC



6. *Fisher Street for boats to Moher Cliffs*. The club newsletter refers to the Fisher Street Pot and (another) Poulmagollum, with the entrance being a 40-foot shaft leading to a real river passage. This is named on OSI 1:2500 sheet Clare 8-9 (1895).

One of the most interesting features in the area, though not marked on Railton's map, is in the cave known as Poll-an-Ionáin which the SWCC newsletter reported "has a very small entrance, 800ft of low crawl and a large chamber containing a 30ft stalactite". This had been discovered just a few years previously and is now recognised as the longest free-hanging stalactite in Europe. After a lengthy legal battle, Doolin cave was opened to the public as a show cave in 2006.

The Geological Survey of Ireland has published a 1:50,000 sheet titled *Landscape and Rocks of the Burren* (2008). This includes general information about the formation of underground rivers, caves and turloughs but gives no specific information about the cave systems visited and surveyed by Railton and others.

For those with an interest in surveying techniques and the production of maps, Railton's achievements with the survey of cave systems should be of interest. The depiction of features above ground by means of conventional symbols together with the use of hachuring, contours and layering is well known, but the challenges facing anyone setting out to survey a cave system are very different. In the SWCC Newsletter 47 (1964)<sup>7</sup> he published a review of the existing surveys of caves in South Wales and reported that most of the drawings and notes gave "no useful information or even impression of the nature of the caves they intend to portray". He then pointed out that survey of a cave is not like that of a footpath through fields in flat country and should be more akin to "an architect's drawing of a house and of necessity has to give a true representation of the place, indicating the dimensions and particularly height of passages, relative position of chambers, slope of roof, nature of the floor and other details". Caves are a complex system of channels and cavities, with limited line of sight, constantly changing levels and without the benefit of daylight, but he suggested that it wasn't necessary to be a qualified surveyor to produce a good cave survey, which should include a plan drawn with lettered and numbered squares for reference purposes and with magnetic or true north clearly indicated. Transverse sections of passages should be drawn on the plan as frequently as necessary to show changes of form. A longitudinal section is essential to show the slope or drop of floors and roof.

As mentioned in the introduction, one of Railton's major achievements with the SWCC was his completion of the survey of the Ogof Ffynnon Ddu system (which lies below the SWCC club hut), published by the CRG in 1953. In the 1964 newsletter he reported that the published plan and sections had become

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<sup>7</sup> Published online at [www.swcc.org.uk/joomla-swcc/club/newsletter](http://www.swcc.org.uk/joomla-swcc/club/newsletter)

incomplete as new passages had been found and work was then in hand to bring the drawings and description up to date.

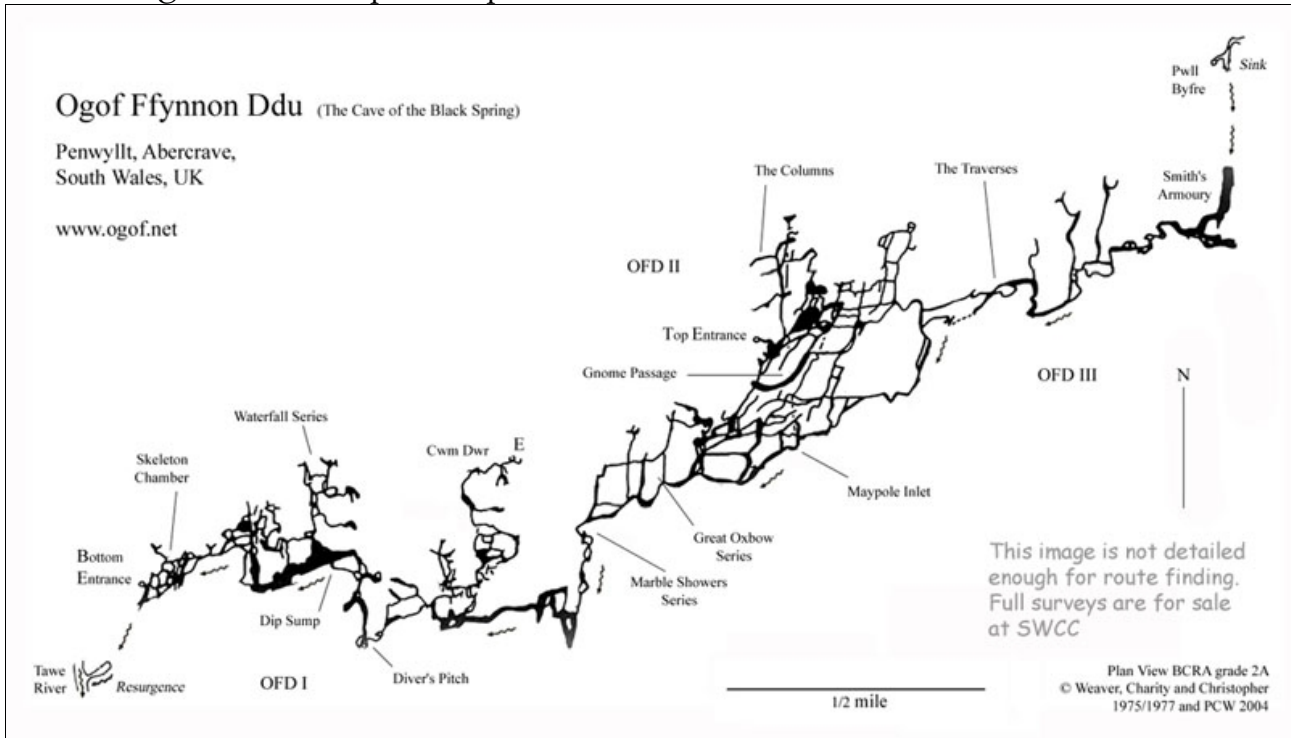


Figure 5. Survey of Ogof Ffynnon Ddu, by permission of South Wales Caving Club

Further revisions were made up to 2004 and this simplified version of the survey clearly indicates the challenge of representing the intricacies of a complex cave system on a flat sheet of paper. More recent developments in survey techniques include the introduction of GPS-based software, in much the same way that above-ground mapping has developed since the early days of the Ordnance Survey.

Despite ill-health in later life, Railton retained an active interest in caving and he was elected President of the South Wales Caving Club in 1970; it was during his Presidency that Lewis Railton died on 25 August 1971 and the following brief extracts from his obituary published in the club newsletter give some idea of his



huge contribution to the development of caving in the UK, Ireland and further afield – “his many caving interests included photography, survey and development of caving equipment” and “during his career Lewis travelled extensively, visiting caves in many countries, including Yugoslavia, France, Belgium, Austria, Norway and the USA.” His widow died two years later, in September 1973, aged just 54.

Had he not bothered to write his full name on one of the two maps which I acquired, most of this information would have remained unknown outside the caving world.

Figure 6. Lewis Railton in Ogof Ffynnon Ddu, by permission of South Wales Caving Club