

MICROPALAEONTOLOGY NOTEBOOK

Arthur Earland (1866–1958) and his links with Ireland

PATRICK N. WYSE JACKSON¹, M. ROBINSON² & W. E. N. AUSTIN²

¹Department of Geology, Trinity College, Dublin 2, Ireland (e-mail: wysjcknp@tcd.ie)

²School of Geography and Geosciences, University of St Andrews, Irvine Building, St Andrews, Fife KY16 9AL, Scotland, UK

INTRODUCTION

In a recent paper, Robinson & Austin (2001) document the foraminiferal slide collection of Arthur Earland, and the correspondence between him and D'Arcy Wentworth Thompson, held at the University of St Andrews, Scotland. A number of slides are of material collected in Irish waters, and an interesting photograph is reproduced showing Earland standing on the Irish Fisheries cruiser *Helga* in the company of two men. This brief note examines Earland's links with Ireland, discusses the provenance of some of Earland's Irish material, confirms the date the photograph was taken, suggests who the photographer was, and provides biographical information on the two additional men portrayed in it – G. P. Farran and R. Southern.

EARLAND IN IRELAND IN 1911

Figure 1 (of Robinson & Austin, 2001) shows Earland, Farran and Southern on the deck of the cruiser *Helga*. This cruiser was used for a large number of research cruises carried out by the Irish Fisheries board between the early 1900s and 1914. The photograph dates from the middle of August 1911 when the ship was used during the celebrated Clare Island Survey off the west coast of County Mayo, Ireland (Praeger, 1949). This ambitious project brought together over 200 European naturalists and experts (including Earland), in order to carry out a comprehensive survey of all aspects of the natural history in and around Clare Island (Collins, 1985). Southern directed the dredging operations from the *Helga*.

Edward Heron-Allen and Arthur Earland were asked to work up the Foraminifera and arrived at Mulranny, County Mayo from London on 14 August 1911. They spent a few days conducting shore collecting in and around Achill Sound and Clew Bay and on Achill Island. After a few days the *Helga* arrived with Farran and Southern on board, and the men spent a number of days on board dredging around Clare Island. It was during this cruise that the photograph of Earland, Farran and Southern was taken, probably by Edward Heron-Allen. The work of the Clare Island Survey was documented photographically by the celebrated Belfast photographer Robert John Welch (1859–1936) (see Evans & Turner, 1977). While it is possible the image of Earland is by Welch, we discount this as its quality is poor, and Welch's images were excellent. After the steamer had departed the Achill area Heron-Allen and Earland went to Dog's Bay near Roundstone to collect further (Praeger, 1912, 1915a).

The results of the Clare Island Survey were published in 68 parts by the Royal Irish Academy and Edward Heron-Allen and Earland wrote up the Foraminifera in a long paper illustrated with some beautiful plates, four of which are reproduced in

colour. In the paper they identified 287 species of which 55 were new to Ireland, 39 new to the British Isles, and 13 new to science (Heron-Allen & Earland, 1913). Southern authored eight parts including that on the tunicates and hemicordates co-authored with Farran. In total 5269 species were recognized during the complete survey; 1253 were new to Ireland, 343 were new to the British Isles, and 109 were new to science (Praeger, 1915b).

In 1914 the *Helga* was requisitioned for a different purpose – as a patrol ship for the war effort. In 1916 it was converted into a gunship and it was sailed up the River Liffey to the centre of Dublin. There it bombarded the positions occupied by the insurrectionists during the Easter Rising of 1916. It is ironic that during the hostilities one of the premises destroyed was that of Eason and Sons, who printed the *Irish Naturalist* – the premier natural history journal published in Ireland at that time, and in whose pages the results of a number of *Helga* cruises were reported.

PROVENANCE OF EARLAND'S IRISH MATERIAL

Some of Earland's slides now held at St Andrews are Irish. Included in the listing given by Robinson & Austin (2001) are examples of 15 taxa from the Joseph Wright Collection obtained during the *Lord Brandon* expedition, and others from Charles Elcock of Belfast, and from G. W. Chaster. The type material relating to the Clare Island Survey was donated to the Natural History Museum, London in 1926 (Hodgkinson, 1989); while further Irish material from County Donegal is held at the National Museum, Dublin. This was donated in 1913 (Cleevely, 1983).

Joseph Wright (1834–1923) was a Cork-born Quaker who became a grocer in Belfast, and during his long life indulged his passion for Foraminifera (Wilson, 1987). He amassed a huge collection and published extensively on his material. Like many naturalists at that time free exchange of material was made with like-minded enthusiasts, and it is probable that Earland was given this material by Wright himself. Correspondence between the two is in the National Library of Ireland in Dublin – this suggests that Earland gained insights in techniques on studying Foraminifera from Wright (Wilson, 1987). Wright was a member of the *Lord Brandon* expedition in 1885 which explored and collected from deep waters up to 120 fathoms off south-west Ireland (Praeger, 1949). Given his subsequent friendship with Earland it is co-incidental that D'Arcy Thompson was also a member of this expedition albeit for the first two days only. The Wright material listed in Robinson & Austin (2001) is said to be from 'Ft SKillig'; this is probably the Great Skellig, one of two small islands situated off Valentia Island, County Kerry.

Additional material from the *Lord Brandon* expeditions is in the Hunterian Museum Glasgow and in the Ulster Museum Belfast.

George W. Chaster (1863–1910), from whom Earland obtained material from Dingle and Valentia, County Kerry and from Southport, was a medical doctor who practised at Southport. He was a conchologist of some distinction and spent most of his holidays in Ireland dredging and collecting (Praeger, 1949).

FARRAN AND SOUTHERN

The caption to Robinson & Austin's (2001) figure 1 refers to Earland's companions as 'seamen with the Irish Fisheries Board' and identifies one as 'R. Sothern'. The description suggests that the two men were the marine equivalents of manual labourers. This is far from the truth, since both George Philip Farran (1876–1949) and Rowland Southern (1882–1935) were prominent and experienced fisheries zoologists who between them produced a large canon of published research. In the photograph both are dressed in jackets and Southern is wearing a turtle-neck pullover that must have been considerably more comfortable than Earland's stiff collar. Farran is examining the holdfast of the brown alga *Laminaria* while Southern holds a large regular sea-urchin in his hands.

G. P. Farran was born in Dublin. After a distinguished undergraduate career at Trinity College, Dublin during which he received the highest honour – a Large Gold Medal – he became a marine zoologist, first working in County Galway at a small marine station, before joining the Department of Agriculture and Technical Instruction in 1900. He rose through the ranks and ended his career as Chief Inspector of Fisheries in 1946. He published extensively and widely on copepods and other planktonic groups – his papers included a report on copepods from the Great Barrier Reef. He was a Member of the Royal Irish Academy and frequently attended the meetings of the International Council for the Exploration of the Sea between 1920 and 1946. In 1948 he was elected an Honorary Member of the Challenger Society in recognition of his work as a marine biologist (Went, 1949).

R. Southern was born in Lancashire and, after training as a chemist in Bolton, he joined the laboratory of the Dublin City analyst. Soon afterwards he developed an interest in biology and in 1911 was appointed to the staff of the National Museum in Dublin. Five years later he moved to the Fisheries Branch of the Department of Agriculture and Technical Instruction and remained there as Assistant Inspector of Fisheries until his untimely death in 1935. He became an expert on Irish terrestrial annelids before transferring his interest to marine polychaetes and other worms. During the first World War I he investigated the potential of Irish lakes and rivers to provide a substantial food source, and later carried out much work on the growth of

salmon and trout and their feeding habits. Southern was a Member of the Royal Irish Academy. According to an obituary penned by Farran, Southern's work 'was marked by an almost meticulous thoroughness and accuracy' (Farran, 1936). The majority of his publications appeared in the *Irish Naturalist* or the *Proceedings of the Royal Irish Academy*.

AMENDED FIGURE CAPTION (ROBINSON & AUSTIN, 2001)

In the light of the above it is suggested that the caption for figure 1 reproduced in Robinson & Austin (2001) should be amended to read as follows:

Fig. 1. Arthur Earland (centre), pictured with George Phillip Farran and Rowland Southern, both scientific officers with the Fisheries Branch of the Department of Agriculture and Technical Instruction, aboard the Irish Fisheries Cruiser *Helga*. The photograph was taken during the Clare Island Survey in August 1911, probably by Edward Heron-Allen. This photograph is reproduced with the permission of the Keeper of Manuscripts, St Andrews University Library (ms. 45789)

Manuscript received 11 April 2002

Manuscript accepted 2 August 2002

REFERENCES

- Cleavelly, R.J. 1983. *World Palaeontological Collections*. British Museum (Natural History) and Mansell Publishing Limited, London, 1–365.
- Collins, T. 1985. *Floreat Hibernia: a bio-bibliography of Robert Lloyd Praeger 1865–1953*. Royal Dublin Society, Dublin, 1–151.
- Evans, E.E. & Turner, B.S. 1977. *Ireland's Eye: the photographs of Robert John Welch*. Blackstaff Press, Belfast, 1–195.
- Farran, G.P. 1936. Rowland Southern 1882–1935. *Irish Naturalists' Journal*, **6**: 42–45.
- Heron-Allen, E. & Earland, A. 1913. Foraminifera. *Proceedings of the Royal Irish Academy, Clare Island Survey*, **31, Part 64**: 1–188.
- Hodgkinson, R.L. 1989. The Heron-Allen and Earland type slide collection of Foraminifera in the British Museum (Natural History). *Journal of Micropalaeontology*, **8**: 149–156.
- Praeger, R.L. 1912. The Survey of Clare Island. Report of progress during 1911. *Irish Naturalist*, **21**: 39–41.
- Praeger, R. Ll. 1915a. General Introduction and Narrative. *Proceedings of the Royal Irish Academy, Clare Island Survey*, **31, Part 1**: 1–12.
- Praeger, R. Ll. 1915b. General Summary. *Proceedings of the Royal Irish Academy, Clare Island Survey*, **31, Part 68**: 1–15.
- Praeger, R.L. 1949. *Some Irish Naturalists*. Dundalgan Press, Dundalk, 1–208.
- Robinson, M. & Austin, W.E.N. 2001. Arthur Earland: the foraminiferal slide collection and correspondence at the University of St Andrews, Scotland. *Journal of Micropalaeontology*, **20**: 97–122.
- Went, A.E.J. 1949. George Philip Farran 1876–1949. *Irish Naturalists' Journal*, **9**: 266–268.
- Wilson, J. 1987. Joseph Wright, F.G.S., 1834–1923. *Irish Naturalists' Journal*, **22**: 169–180.