

Giants of the Irish Quaternary



Irish Quaternary Association

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edited by

Catherine Dalton and Gayle McGlynn

Irish Quaternary Association

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Introduction

In the geological history of Earth, four periods (Primary, Secondary, Tertiary and Quaternary) were initially used to explain Earth time. The Quaternary period, beginning 2.6 million years ago (mya) and continuing to the present day, is used to describe the youngest earth deposits. This period is characterised by several glaciations (the 'Ice Ages'). Our landscape has been built up in layers of sediments and fossil deposits, and Quaternary scientists help us read these deposits.

This volume contains profiles of a cross-section of scientists who made seminal contributions to the understanding of the Quaternary landscapes of Ireland. Scientists included in the booklet carried out Quaternary-related research in (or relevant to) Ireland, but were not necessarily Irish by birth. The booklet evolved from a 1-day seminar hosted by the Irish Quaternary Association in the Hunt Museum, Limerick, on April 21st 2018, *Standing on the shoulders of giants: A Quaternary Science Retrospective*. Members of the Irish Quaternary Association were invited to write articles on individual scientists, and the articles included in this volume represent a selection of key individuals.

These scientists have provided inspirational role models for generations of students through their gifts of curiosity. For example Francis Synge dedicated his life to Quaternary research with an unerring eye for geomorphology and excellent draughtsmanship, according to Dr Sam Roberson from the British Geological Society, while Sydney Mary Thompson and Mary K. Andrews were undaunted by the male-dominated field of glacial geomorphology and were greatly supported by the Belfast Naturalists' Field Club. Prof. Keith Bennett of the University of St Andrews describes Bill Watts as a towering figure in Quaternary palaeoecology. Another pioneering female proposed by Dr Bettie Higgs (University College Cork), Marie Tharp (a cartographer and oceanographer as opposed to a Quaternary scientist) paved the way for the deeper understanding of plate tectonics and Ireland's marine sediments by documenting the Mid Atlantic valley despite exclusion from expeditions and credit for her discoveries. The inquisitiveness and inventiveness of these and many other individuals helped put Irish research and researchers at the forefront of efforts to decipher the land and seascapes.

The primary objective of the public seminar, this booklet of Quaternary

Giants and a future exhibition are to share knowledge of the evolution of scientific understanding of Quaternary landscape formation in advance of a major international conference to be held in Dublin in 2019, the 20th Congress of the International Union for Quaternary Research (www.inqua2019.org). Together these initiatives will serve as a vibrant connection between history, teaching and learning and the world of landscape science in practice.

Catherine Dalton

(Chair, Irish Quaternary Association)

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