

Preface

The richness of the Irish Quaternary landscape has ensured that Ireland has been the focus of sustained research for almost two centuries. However, our interaction with the Irish Quaternary goes beyond an academic interest due to its critical social, cultural, and economic significance. Managers of the Irish landscape at local and national levels must take account of our national Quaternary heritage in addressing topics as broad as siting wind turbines, mitigating landslides, and protecting aquifers and the societal impact of sea level rise. Our agricultural soils, peat bogs, etc., are of Quaternary origin, and managing these in concert with other concerns such as aquifer protection requires knowledge of the landscape's origins. In addition to immediate economic and societal issues, the Irish Quaternary provides unrivalled data on the causes and consequences of global climate change. Irish sedimentary archives of environmental responses to climate change are essential for improving our adaption to and mitigation of possible future climate scenarios. Future research in Ireland will build on the rich legacy described briefly here and in other chapters, and thus, we hope this book proves to be an important resource in these endeavours.

This volume summarises some of the notable advances in a number of fields of Quaternary research in the last 30 years:

Chapter “[The Pre-Quaternary Landscape of Ireland](#)” (Simms and Coxon) reviews our current understanding of Ireland's pre-Quaternary landscape; Chapter “[Interglacial Sequences](#)” (Coxon et al.) reviews current evidence for the nature, distribution, and age of interglacial deposits in Ireland; Chapter “[Glacial Geomorphology of the Last Irish Ice Sheet](#)” (Meehan) outlines the geomorphological evidence for glaciation collated in Ireland; Chapter “[The Last Irish Ice Sheet: Extent and Chronology](#)” (Ballanyne and Ó Cofaigh) details our current understanding of the development and behaviour of the last BIIS, gained from ever-improving geochronological constraint; Chapter “[Deglaciation of the Northern Irish Sea Basin](#)” (Knight) focusses on detailing a relatively well age-controlled subset of Ireland's glacial records, those from the northern Irish Sea Basin; Chapter “[Relative Sea-Level Change Around the Irish Coast](#)” (Edwards and Craven)

reviews our current understanding of pre- and post-glacial relative sea level change gained from models and studies of Irish coastal sites; Chapter “[Periglacial and Paraglacial Processes, Landforms and Sediments](#)” (Wilson) outlines our current understanding of evidence for the form and occurrence of periglacial landforms and sediments in Ireland; Chapter “[Irish Quaternary Vertebrates](#)” (Monaghan) summarises our understanding of Quaternary faunal population changes, and Chapter “[The Human Colonisation of Ireland in Northwest European Context](#)” (Warren) looks at the evidence for human colonisation of Ireland during the Holocene period in the context of pan-European archaeological evidence.

Dublin, Ireland
Maynooth, Ireland
Dublin, Ireland

Peter Coxon
Stephen McCarron
Fraser Mitchell

Advances in Irish Quaternary Studies

Coxon, P.; McCarron, S.; Mitchell, F. (Eds.)

2017, VII, 316 p. 121 illus., 85 illus. in color., Hardcover

ISBN: 978-94-6239-218-2

A product of Atlantis Press