Bulletin of the Geological Society of Norfolk

No. 71 (2021)

Published April 2021

CONTENTS

	Page
Editorial	1
Obituary: Richard Gilbert West FRS (1926-2020)	3
Obituary: Peter Garvan Hoare (1943-2020)	7
West, R.G. and Gibbard, P.L.	
On the Palaeolithic site at Three Hills, Warren Hill, Mildenhall,	13
Suffolk, England.	
Donovan, S.K.	
A comment on the classification of borings.	43
Riches, P.	
Book Review Measures for Measure: geology and the industrial	49
revolution.	

Back issues of the Bulletins 1-66 are free online in the Biodiversity Heritage Library https://www.biodiversitylibrary.org/bibliography/166261#/summary

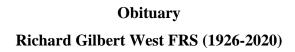
PDFs of articles in Bulletins 67-current are available from the editor (j.andrews@uea.ac.uk)



Click here, to order printed copy of the Bulletin. Please, specify the issue or year required.

Print back copies of the Bulletin cost £3.50 each (members); £10.00 each (non-members). For membership details consult our web site http://www.norfolkgeology.co.uk

ISSN0143-9286





Richard Gilbert West at Beachamwell Warren in 2011. Photograph reproduced by kind permission of the British Library (https://www.bl.uk/voices-of-science/interviewees/ richard-west).

Richard (R.G.) West, a hugely influential figure in British Quaternary geology, died on 31 December 2020 in Addenbrookes Hospital, Cambridge after a short illness. Richard was born on the 31 May 1926 at Beckenham in Kent. He was educated at King's School Canterbury, but was evacuated during the Second World War to Cornwall, where his interest in botany and geology was stimulated by long walks along the coast.

Obituary

Peter Garvan Hoare (1943-2020)

Originally from Hertfordshire, Peter started his career at the age of 16 as a laboratory assistant at Rothamsted Experimental Station, Harpenden. By 1971 he was working for the British Geological Survey as Higher Scientific Officer, before embarking on his PhD at Trinity College Dublin in 1972. After completing his doctorate, his obvious talent for teaching, as well as his aptitude for thorough research, helped gain him a Senior Lectureship at Cambridgeshire College of Arts & Technology (now Anglia Ruskin University).

In 1999, at 56 years old, Peter took early retirement from lecturing, and (in his own words) grabbed, "...a life-enhancing change of 'career' with both hands and never looked back". He undertook two spells of teaching at The University of Sydney in 2003 and 2004, catalogued the glacial erratic collection and digitally scanned the Hallam Ashley photograph archive at Norwich Castle Museum & Art Gallery, volunteered at the Natural History Museum, London, and then became an Associate Member of the Ancient Human Occupation of Britain group. He was also a Visiting Academic at The British Museum, a Geology Research Associate at Norfolk Museums Service (2010-2015), an Honorary Senior Research Fellow at the School of Geography, Queen Mary University of London and an Associate Member of the Pathways to Ancient Britain Project.

Peter had a close association with The Geological Society of Norfolk, leading numerous field meetings, reviewing contributions for the Bulletin and publishing on the glacial geology of the area. His writing style was exemplary, coupled with meticulous editing and proof-reading skills learned from his father who was a professional editor. He was GSN President twice – in 1997 and again in 2010. He also served on the committee as an ordinary member, as well as Treasurer and Membership Secretary.

ON THE PALAEOLITHIC SITE AT THREE HILLS, WARREN HILL, MILDENHALL, SUFFOLK, ENGLAND

R.G. WEST¹ & P.L. GIBBARD^{2, 3*}

¹deceased

² McDonald Institute for Archaeological Research, University of Cambridge, Downing Street, Cambridge CB2 3ER.

³ Scott Polar Research Institute, University of Cambridge, Cambridge CB2 1ER.

*e-mail: plg1@cam.ac.uk

ABSTRACT

The Lower Palaeolithic site at Three Hills, Warren Hill, Suffolk, is noted for the abundance of artefacts recorded there since the middle of the 19th century. The interpretation of the geology and archaeology of this site has been the subject of controversy for several years. Is it the site of proglacial sands and gravels of the Tottenhill Glaciation or of a pre-Anglian river traversing the Fenland? If the latter is the answer, the site provides evidence of Palaeolithic man in pre-Anglian times. A description of studies of the site and the two interpretations is given. The geology and a consideration of the place of Three Hills in the regional landscape history leads to the conclusion that Three Hills is a site of proglacial accumulation during the Wolstonian Tottenhill Glaciation. The origin of the Palaeolithic artefacts at Three Hills is considered and related to times of Palaeolithic occupation of the Fenland area in the early part of the Wolstonian.

Bull. geol Soc. Norfolk (2021), 71, 13-41.

A COMMENT ON THE CLASSIFICATION OF BORINGS

Stephen K. Donovan

Apartment 5, Worsley Point, 251 Worsley Road, Swinton,

Manchester M27 0YE, UK

email: <u>SKennethDono@gmail.com</u>

ABSTRACT

Modern traces and trace fossils are biogenic sedimentary structures and should be classified in a system superficially similar to, but independent from, biological nomenclature. However, it is not unusual for traces and trace fossils to be described, but not named (e.g. 'small round holes'), or to be assigned to a producing organic group (family, genus or species) for which the evidence is circumstantial. That is, the inferred producing organism is not preserved in intimate association with the trace fossil. In two recent GSN papers ichnofossils were identified, but incorrectly named or not named at all. They are correctly classified herein. Two nominal ichnogenera, probably modern traces, are identified in builders' rubble of churches in west Norfolk – Gastrochaenolites isp. and Entobia isp. – and two are found in eroded clasts in glacial sedimentary rocks – Gastrochaenolites isp. of Quaternary age and Rhizocorallium isp. of Mesozoic age. The principal message is that trace fossils are sedimentary structures, not organisms, just as your footprint is not Homo sapiens Linnaeus.

Bull. geol Soc. Norfolk (2021), **71**, 43-48.

BOOK REVIEW

MEASURES FOR MEASURE: GEOLOGY AND THE

INDUSTRIAL REVOLUTION

Mike Leeder, Dunedin Academic Press, Edinburgh 2020. 350pp. £24.99

Reviewed by Peter Riches

3A, Albemarle Road, Norwich NR2 2DF

e-mail: pfriches@hotmail.com

Leeder demonstrates his wide-ranging interests in the breadth of his new book *Measures for Measure*, written in the strong interdisciplinary traditions of the University of East Anglia, where he is Professor Emeritus in the School of Environmental Sciences. He sets out to answer the "what, where, how and when" questions about British Carboniferous geology and the Industrial Revolution. On the one hand, the book is a celebration of human ingenuity in understanding the origin of Carboniferous rocks and the exploitation of their enormous mineral wealth. On the other hand, it explores the adverse social and environmental consequences of the Industrial Revolution. What sets *Measures for Measure* apart from other geology books is the way it demonstrates, in some detail, how the geological history of the Carbonifeous rocks is closely tied to the industrial, economic and social development of Britain.

Bull. geol. Soc. Norfolk (2021), **71**, 49-51.