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C.E. RANSON'S DATA FROM THE GLACIFLUVIAL AND OTHER SANDS AND GRAVELS OF NORTH NORFOLK, ENGLAND

P.H. Banham*

Department of Geology, Royal Holloway,
University of London, Egham, Surrey, TW20 OEX, UK.

* email: phbanham@cwcom.net

ABSTRACT

General observations and clast lithological data collected during the 1970s by the late Colin Ranson suggest that the widespread sands and gravels of north Norfolk were laid down during the melting back of the (second?) Lowestoft ice sheet by currents flowing broadly to the south-east.

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THE GLACIAL GEOLOGY OF THE WEYBOURNE AREA, NORTH NORFOLK: A NEW APPROACH

P.R. Fish 1, C.A. Whiteman 1, B.S.P. Moorlock 2, R.J.O. Hamblin 2 and I.P. Wilkinson 2

¹ School of the Environment,

University of Brighton, Cockcroft Building, Lewes Road, Brighton, BN2 4GJ, UK.

² British Geological Survey,

Nicker Hill, Keyworth, Nottingham, NG12 5GG, UK.

ABSTRACT

Study of till sections in the Weybourne area of north Norfolk revealed a succession of brown and pale yellow laminated diamictons. In addition to traditional sedimentary analyses, a new technique, based on chalk micropalaeontology was employed to provenance both chalk clasts and chalk microfossils from the matrix in order to aid interpretation of sediments. The results show that chalk material from Weybourne till has been sourced primarily from the west but that some had an eastern source. The sediments at Weybourne are interpreted as being the result of a two-fold glacial advance. The first advance, by Scandinavian Ice associated with the Happisburgh Diamicton, deposited a till primarily composed of reworked crag with some intermixed eastern material. The second advance from the south-west, by the British Ice Sheet, deformed and glaciotectonised the Crag-rich till, mixing in western erratics and resulting in the complex sedimentary sequence seen at Weybourne. All the tills sampled are therefore correlated with the Lowestoft Till.

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EROSION BY ICE, RIVERS AND THE SEA: A COMPARISON OF RATES OF EROSION AND TOTAL DENUDATION ACHIEVED IN EAST ANGLIA OVER THE LAST HALF MILLION YEARS

Keith M. Clayton

School of Environmental Sciences, University of East Anglia, Norwich, NR4 7TJ, UK.

ABSTRACT

Erosion rates and total erosion achieved in East Anglia over the last 450,000 years (since the end of the Cromerian) are described. Processes include glaciation (the Anglian ice advance), rain and rivers ('normal erosion' of W.M. Davis), solution (part of the total work done by rain and rivers) and marine erosion. The data illustrate well the concepts of magnitude and frequency, whilst quantification corrects the errors of estimates based on theory (as represented in the literature) or the perception derived from observations of process and landforms today.

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