

# Bulletin of the Geological Society of Norfolk

No. 22 (1972)

Published September 1972

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## MAMMALS OF THE LAST INTERGLACIAL IN NORFOLK

*B. McWilliams*

Castle Museum Norwich,  
The Shirehall, Market Avenue, Norwich, NR1 3JQ, UK.

### # INTRODUCTION

*Mammalian remains have been found from six sites in Norfolk though to be of Ipswichian age: Mundesley, Wretton, Beetley, Wortwell, Shropham and Swanton Morley. West, (1961) noted the correlation of this period and the Morston raised beach, the likelihood of the Mundesley 'river bed' being Ipswichian, and the discovery of the Wretton site. In the last decade four more sites have been discovered with mammalian remains which are now in Norwich Castle Museum.*

# No formal abstract available for this paper.

Bull. geol. Soc. Norfolk (for 1972) **22**, 2-9. (Published September 1972)

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**LOWER PLEISTOCENE MOLLUSCAN ASSEMBLAGES AND POLLEN  
FROM THE CRAG OF ALDEBY (NORFOLK)  
AND EASTON BAVENTS (SUFFOLK)**

*P.E.P. Norton*<sup>1</sup>, and *R.B. Beck*<sup>2</sup>

<sup>1</sup> Department of Zoology,  
University of Glasgow, Glasgow, G12 8QQ, Scotland.

<sup>2</sup> North Yarde, Bishop's Nympton,  
South Molton, North Devon, EX36 4NY, UK.

**ABSTRACT**

*Molluscan assemblages from the Crag at Aldeby and Easton Barents are described and a pollen diagram from Aldeby is presented. This shows a Barentian pollen spectrum enabling correlation with the deposits at Ludham and Easton Barents to be made. It is suggested that the Aldeby shelly Crag is Antian in age. Palaeoecological interpretations from the three sites are compared. The following marine facies in the Antian - early Barentian are deduced:*

- 1. A littoral facies of the early Antian, with deposits at Easton Barents.*
- 2. An inner-sublittoral facies of the Antian at Aldeby, Easton Barents and Ludham. The sea-bed at Aldeby was varied with many habitats for Mollusca. Around Easton Barents it was more uniform, coarse with muddy interstitial material. At Ludham it was varied, with freshwater influence.*
- 3. An early Barentian marine phase when the water was apparently deeper, and at Easton Barents warmer as well, than in the Antian. The vegetational evidence from intercalated pollen analyses, however, suggests the climate was becoming colder. This problem awaits solution.*

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## GEOLOGY AT GRESHAM'S SCHOOL

*R. Coleman*

Department of Geography and Geology,  
Gresham's School, Cromer Road, Holt, NR25 6EA, UK.

### # INTRODUCTION

*A feature of Technical colleges and Comprehensive schools is the wide range of courses offered at both 'O' and 'A' Levels, with all sorts of rare combinations possible according to the students' choice. Geology for the past five years has been given the status of a normal 'A' level with a full two year course. It therefore takes its place in the four groups of subjects offered at 'A' level, each sixth-former selecting one subject from two to four of the groups according to his abilities and career needs. Boys studying Geology at Gresham's tend to fall into three major categories:*

- (i) Boys intending to read Geology at University.*
- (ii) Boys keenly interested who feel a high grade (for University entry) possible, yet who will be reading some other subject as undergraduates.*
- (iii) Boys whose Mathematics is not strong enough to cope with Physics 'A' level with great success, and who wish nonetheless to gain three science 'A' levels, combining Geology with, usually, Biology and Chemistry. A large number of these will possibly have careers in agriculture, veterinary science, information science, technical writing, soil science, land surveying or museum work in mind, and find Geology acceptable as a means of getting onto a science based degree course.*

*It is pointed out that the ideal base of 'A' levels for a degree course in Geology is more probably Chemistry, Physics and Mathematics than Geology itself, but the sixth former may be faced with the problem of entrance competition with, possibly, lower grades in some of these 'ideal' subjects; the weaker scientist may therefore turn to Geology. The total numbers involved generally remain between ten and fifteen in each year.*

# No formal abstract available for this paper.

Bull. geol. Soc. Norfolk (for 1972) **22**, 33-38. (Published September 1972)

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## BOOKS FOR STUDYING G.C.E. AND C.S.E. GEOLOGY

***R.S. Joby***

Department of geography and Geology,  
North Walsham High School, Spenser Avenue, North Walsham, NR25 9HZ, UK.

### # INTRODUCTION

*With the growing popularity of this subject as a school examination subject at all levels, there has been an increased demand and production of books suitable for those studying in schools and colleges. When starting new courses, teachers are faced with over one hundred possible titles, so in this article it is intended to examine some of those used with success by pupils and teachers, as a guide to those venturing into the field of Geology teaching.*

*All G.C.E. boards offer 'O' or 'AO' level papers, and all except Southern board offer 'A' level papers. Only a few C.S.E. boards have Mode 1 Geology examinations at present, but this should not deter potential teachers of the subject, as they can compose their own Mode 3 syllabus, which can be a very satisfying experience to those who find existing syllabuses frustrating.*

*With more than 1000 schools teaching the subject, and more starting annually, there is a wide market for examination oriented Geology books, and many of a different nature find their way into school libraries.*

*For C.S.E. and 'O' level syllabuses, the book giving the fullest coverage without loss of accuracy is 'A New Geology' by Michael Bradshaw, published by English Universities Press in 1968 and reprinted since.*

# No formal abstract available for this paper.

Bull. geol. Soc. Norfolk (for 1972) **22**, 39-42. (Published September 1972)

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**REPORT ON FIELD MEETINGS TO HUNSTANTON AND WEST RUNTON**

*P.G. Cambridge*

258 Bluebell Road,  
Norwich, NR4 7LW, UK.

### # INTRODUCTION

*Hunstanton (25<sup>th</sup> June 1972).*

*The upper part of the Carstone is unfossiliferous but shows excellent current bedding, and although showing differences in cementation sometimes the jointing is so perfect that the beach resembles a flagged pavement. The striking Hunstanton Red Rock bears little resemblance to the Gault clay, of which it is the stratigraphical equivalent. It and the lower part of the Lower Chalk is extremely fossiliferous. Large branching structures are common at this level. They have been described as a sponge *Spongia paradoxica* but are more likely to be traces of a burrowing organism. Between the Red Rock and the Paradoxica Bed, is a thin seam rich in iron oxides, which weathers out leaving a series of cavities. A recent boring for water near Hunstanton penetrated this junction and gave a copious flow of bright red water.*

*West Runton (23<sup>rd</sup> July 1972).*

*A previous visit to West Runton was described in Bulletin No. 21 on the present occasion the afternoon was spent examining cliff erosion and coast defences at Overstrand, and the Maastrichtian Chalk erratics and overlying Quaternary deposits of Sidestrand. In the estuarine sands and silts above the Stone Bed and 'Weyboume Crag', thin flat pieces of cementstone occur which exhibit sun cracks, and mollusc borings, etc., and sometimes contain plant fragments and remains of shells. One of these pieces, which are abundant on the beach, was broken open and proved to contain a fine fossil example of the bryozoan **Flustra foliacea L.***

# No formal abstract available for this paper. (Summary accounts of field trips, 1972)

Bull. geol. Soc. Norfolk (for 1972) **22**, 43-44. (Published September 1972)

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