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TAPHONOMY OF THE BORING *GASTROCHAENOLITES* LEYMERIE: IMPLICATIONS FOR SEDIMENTARY GEOLOGY

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ABSTRACT

The only macroscopic traces capable of being transported are borings in litho- and bioclasts. Gastrochaenolites *Leymerie is a common and prominent boring in reworked Upper Cretaceous chalk lithoclasts on the north coast of Norfolk, UK, and elsewhere.* Gastrochaenolites ornatus *Kelly & Bromley is commonly recognised,* G. lapidicus *Kelly & Bromley less so. Chalk clasts including* Gastrochaenolites *from the Norfolk chalk are more or less corraded and have lost the shells of the producing bivalves.* Gastrochaenolites *remnants are usually the base, base and chamber or chamber and neck. Shallow borings (*Entobia, Caulostrepsis*) weaken the clast surface, but deep* Gastrochaenolites *likely lead to breakage of clasts during storms. Each chalk clast bored by* Gastrochaenolites *had a different history; only their broad development can be determined. A schematic view is presented outlining a kaleidoscope of possible taphonomic trajectories.*

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QUARTZOSE GRAVELS AT HALL HEATH, LACKFORD, NORTH SUFFOLK

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ABSTRACT

The sands and gravels at Hall Heath, Lackford, in northern Suffolk have previously been interpreted as Anglian glacial deposits and as deposits of the pre-glacial Ingham/Bytham River. In this study, field relationships at Hall Heath Pit show southward interdigitation of sands and gravels with laminated muds, giving way to diamiction. The laminated muds were presumably deposited under lower flow conditions than the sands and gravels; muds may have accumulated in a cut-off braid channel where stranded blocks of melting ice were locally depositing till. This interpretation recognises the potentially complex lateral depositional relationship between bodies of till and coeval sand and gravel. Lithological similarities (i.e. high proportion of quartzose clasts and lack of chalky material) of the sands and gravels at Hall Heath with those of the pre-glacial river terrace deposits is due to reworking of the river terraces by glacial activity.

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NORWICH BUILDING STONES: PLANTATION GARDEN TO THE GUILDHALL

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ABSTRACT

Norwich building stones are described at seven main localities on a route from Earlham Road to the Guildhall. Principal lithologies include: Carboniferous crinoidal limestones and fine-grained sandstones; Carboniferous Frosterly Marble; Cretaceous Beer Stone, Jurassic ooidal limestones, Permian Sandstone, granite, larvikite and Cretaceous flint. Fossils include: Carboniferous crinoids, corals and brachiopods; Jurassic bivalves (fragments) and rare Cretaceous belemnites. Relevant aspects of sedimentology, mineralogy, depositional environment and diagenesis are discussed and styles of architectural stone usage are also noted. The text also includes brief contextual reference to both natural geomorphology and quarrying.

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BOOK REVIEW

EXPLORING NORFOLK'S DEEP HISTORY COAST

John A. Davies and David M.G. Waterhouse,

The History Press, Cheltenham 2023. 167 pp. £15.99

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I have been actively researching the Cretaceous palaeontology of chalk and flint erratics on the north Norfolk coast for 15 years, and welcome the appearance of a new book on the geology of the area. However, *Exploring* is aimed, not at the seasoned professional, the undergraduate or even the informed amateur, but, rather, is written for the rank beginner. This is no criticism, just recognition of a different approach that still taught me much. And despite the title, the main focus of the book is archaeological, not geological. It gains a spot in my small library of books on Norfolk geology as a reference. Reading it was hard going in parts, but it is edifying and mainly enjoyable.

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