

GEOSUFFOLK TIMES

Newsletter 47

October 2020

Newbourne Great Pit CGS February 2020

Welcome to issue no.47 of GeoSuffolk Times. Caroline Markham 18.10.20 www.geosuffolk.co.uk

Greetings

How pleasant in these times to receive a greeting card. Here are a few (specimens are from the Natural History Museum, London, and produced by Fine Art America) commercially available palaeontological cards of East Anglian interest. For Suffolk there is a *Terebratula maxima* brachiopod from the Coralline Crag of Sudbourne Park (with a replica Roman lamp for company), whilst another card depicts the bryozoan *Meandropora* – labelled as Carboniferous but surely Pliocene. For Essex there is a lower jawbone of *Stephanorhinus hemitoechus* (Hundshelm Rhinoceros) from the Pleistocene of Ilford, and another shows the skull of *Pliolophus vulpiceps* (dawn horse) from the London Clay of Harwich. For Norfolk there is the belemnite *Belemnitella minor* from the Paramoudra Chalk Formation, and on another card is a *Picea excelsa* (European spruce) cone from the Cromer Forest Bed of Mundesley. One of my favourites is for Cambridgeshire - 'Fossil hunting in Cherry Hinton chalk pit 1822' showing workmen, a collector and a coiled shell (ammonite?) is from the Oxford Science Archive and produced by Magnolia Box.

Bob Markham (RM)

An Erratic at Little Blakenham

GeoSuffolk has been using these times of Covid-19 restrictions to check up on Suffolk's many geosites. Whilst walking past the Chalk pits at Little Blakenham we discovered a large stone next to the footpath, displaying striations and an ammonite – identifying it as a late Jurassic erratic. CM



Virtual Festival of Geology

This year the Geologists' Association Festival on November 7th/8th will be virtual - at <https://geologistsassociation.org.uk/festival/> When we were on Svalbard (see the sketch on the front of GeoSuffolk's Breckland leaflet) we met a military witness of the Vesuvius 1944 eruption and have published his story and photographs for the vFoG – see <https://geosuffolk.co.uk/index.php/news-and-events/events-suffolk-geocene> CM



Type and Figured Specimens

Type and figured fossil specimens at Ipswich Museum have been added to the GeoSuffolk website archive (<https://geosuffolk.co.uk/index.php/archive>). They are in GeoSuffolk Notes (no.71) and also under More GeoSuffolk. Besides local specimens there are some fine Silurian brittle stars from the De Blaquièrè collection. M. De Blaquièrè, French by birth, and resident in England, was an ardent collector of fossils. On his death in the early 1880s, his collection of early Palaeozoic fossils was bought by Sir Richard Wallace of Sudbourne Hall, Suffolk, who was President of Ipswich Museum, to present to the Museum, where it was housed in the 'De Blaquièrè Case'. In 1921 the brittle star specimens were studied and named by the then authority on starfish, Dr William K. Spencer (1878-1955) of Ipswich (a schools' inspector) and included in his Monograph of the British Palaeozoic Asterozoa. Their Type status was later upgraded by Hugh G. Owen, affiliated with London's Natural History Museum, in 1964, who suggested they were probably from Church Hill Quarry at Leintwardine, Herefordshire. RM

Ransome's Patent Stone

On March 26 1845 Frederick Ransome (1818-1893) exhibited specimens of his newly invented artificial stone at a meeting of the Ipswich Philosophical Society. It was soon to be commercially produced at his 'Patent Stone Works' at Flint Wharf, New Cut East, Ipswich, and in 1848 the Institution of Civil Engineers awarded the Telford Medal to Frederick Ransome for this invention. Following this the stone was used for paving the flooring of passages and lobbies in the new Houses of Parliament and, nearby, decorative stone in St Thomas's Hospital and in the new India Office at Whitehall. Vases and architectural ornaments were features of his catalogue.

There were two main types of stone – 'sandstone' for buildings and a more porous variety for grindstones and other purposes. The stone had to be capable of being moulded to the desired shape – so how was it made? Powdered flint was dissolved in caustic soda at high temperature to form sodium silicate, a kind of water glass. This was then mixed with fine white sand forming a soft, plastic material which could be moulded to the desired shape. This was then immersed in a solution of calcium chloride, which produced calcium silicate, the cement which bound the sand grains (silica particles) together. The sodium chloride formed was washed out with water, but sometimes continued to produce a surface efflorescence.

In 1866 manufacture was moved to Greenwich in London. Frederick moved from his home at no.1 New Cut East to Lower Norwood (where 'Rushmere Lodge' was named after his birthplace near Ipswich). He died in Dulwich. RM



The Mansion in Chantry Park, Ipswich is built of Ransome's Stone.

Rhino on the Radio

RM recalls a visit to the Blue Peter TV studios more than 30 years ago, with a Devensian woolly rhinoceros jaw from the Gipping valley – on Radio Suffolk's Evening Show on Monday October 5th.

Find it 2 hours and 7 minutes into the show at <https://www.bbc.co.uk/sounds/play/p08s5p02> Also see GeoSuffolk Times no.41 – July 2019. CM

Peter's Pot Boilers

More photographs by GeoSuffolk member Peter Brinkley – this time of his investigation into 'pot boilers'* A flint nodule was heated in a brazier in his garden, accompanied by the sound of small flint flakes flying off ('not good for home-cooking' said Peter). The resultant broken and cracked pieces are shown in the photograph. RM



*Stones that are heated in a fire and then dropped into water to heat it.

Staying safe on the Coast

East Suffolk Council has launched a campaign on the importance of staying safe on the coast. The East Anglian Daily Times (02.10.20 online) featured the headline: 'Warning issued after people seen climbing rapidly eroding cliffs', with photographs of Bawdsey cliff and beach. Showing Red Crag on London Clay, they illustrate how fortunate we are to have such world-class scientific, educational and heritage sites, giving us a glimpse of the upper part of our planet's crust. For more on our coast see our Suffolk Dragon leaflet -in the GeoSuffolk website archive. RM

Suffolk Coast and Heaths AONB Work Parties

The next geological Work Party is on December 1st. For more details and how to register see <https://www.suffolkcoastandheaths.org/volunteering/volunteer-opportunities/> and keep an eye on the GeoSuffolk website for news of the venue.

A recent visit to Melton Old Church revealed that the grave of Searles Valentine Wood -author of *The Crag Mollusca* 1848 – remains in good condition since clearing by GeoSuffolk and the AONB Work Party in 2015.

CM

