



GEOSUFFOLK TIMES

Newsletter 32
April 2017

Welcome to issue no.32 of GeoSuffolk Times – for those who value Suffolk's Geodiversity. Caroline Markham 24.04.17 www.geosuffolk.co.uk

Ships that Pass....

Geology is the wealth-producing science (but unfortunately not for those of us with our feet still in the Pliocene) and we get occasional glimpses of it in Suffolk. On the 09.02.17 the Chinese-owned VLCC (very large crude carrier) *New Success*, carrying Forties crude oil from Scotland, arrived at Southwold Anchorage, there discharging its cargo to another VLCC, the Belgian-owned *Sandra*, which then moved to anchor off Aldeburgh before departing for Qingdao in China. (This information is taken from the Ipswich Transport Society Journal with thanks.) You may also have seen trains of condensate tanks passing through Suffolk. North Sea natural gas is processed at Bacton in Norfolk to remove 'condensate' (various hydrocarbons and water) which is then transported by rail from North Walsham to the refinery at Parkeston in Essex where methanol is removed, for use as antifreeze, fuel, etc. Bob Markham (RM)

Brickmakers' Wood in Ipswich

This site behind Suffolk New College in Ipswich was featured in the BBC2 programme 'Big Dreams Small Spaces'. It is the site of the former Back Hamlet Brick and Tile Works and of St Helen's Pottery, the two pits practically joining. Both London Clay and Reading Clay were dug at these sites. At the close of the C19th a local potter named Wingrove was known for making fancy objects such as money boxes out of richly-glazed red earthenware. This area, known as the Potteries was cleared of houses in the 1950s. RM

Show and Tell at Ipswich Museum

Wednesday May 31st - meet GeoSuffolk geologists, bring your specimens for identification, enjoy the Museum displays and handle some real fossils! 10.30am – 3pm.

Kiln Meadow Wildlife Challenge

Sunday June 11th – meet GeoSuffolk near the site of the Ipswichian Interglacial at this SWT event.

<http://www.suffolkwildlifetrust.org/events/2017/06/10/big-wildlife-count>

GeoSuffolk is on Facebook and Twitter – find us at:

<https://www.facebook.com/GeoSuffolk>

<https://twitter.com/geosuffolk>

A Day at the Pliocene Beach

GeoSuffolk would like to thank the Suffolk Coast and Heaths AONB volunteers who have helped with maintenance of crag exposures over the winter period. The last event of the season was on February 7th at Sutton Knoll, in the 'Chicken Pit' just to the south of the SSSI, clearing the junction between the Coralline Crag and the Red Crag. Eight willing helpers dug out a section of the (2.7 million year old) Red Crag beach which sits against the Coralline Crag which forms the higher part of the Knoll. The sedimentology of this 'boulder bed' is complex and the area has been opened up for further investigation. Our Pliocene 'beachcombing' produced a variety of fossil molluscs, including *Nucella incrassata*, *Glycimeris*, *Natica*, *Colus* and *Mytilus*.

For more opportunities to join in with AONB work parties next autumn – keep an eye on their web site.

<http://www.suffolkcoastandheaths.org/volunteering/volunteering-learn-more/work-parties/> CM

Boyton 'Delft' Clay

The spring of 2017 issue of the Orford and District Local History Bulletin contains an article *The use of Boyton 'white earth' to produce Dutch Delft in the 17th Century* by Kate van Lookeren Campagne of Amsterdam University. Figure 5 shows a sample of raw clay found at the Hollybush pit – it looks like 'Chalky Jurassic Boulder Clay' but interestingly a sample was said to have fired red. The 1885 Geological Survey memoir records finely laminated lavender-grey marl associated with boulder clay in this area, and Group Captain Frank Britton of London, Mr and Mrs Bantoft of Boyton, and I looked for this on 27.05.79, but without satisfactory result. RM

➤ Our new header photo (above) is of Coralline Crag in the north-east face of Rockhall Wood SSSI – by Judith Hall of GeoSuffolk.



Ipswich Geological Group Bulletins Online

Thank you to the Suffolk Biological Information Service for use of their character recognition scanner to deliver the old IGG Bulletins to our web site archive. Bulletins 1-10 (1966-71) are there so far. (<http://www.geosuffolk.co.uk/index.php/archive/ipswich-geological-group>) There is much to divert, amuse and inform from the very first article – *Geographic and Geological Notes on the Ipswich District*, a personal summary of the geology of the area by H Spencer. Records of pits no longer available are especially useful - e.g. Norwich Crag at Broome near Bungay (R Markham, no.2 March'67); Red Crag at Battisford and Interglacial beds at Beetley, Norfolk (both by R Markham, no.3 August'67); cirripedes in Red Crag at Beggars' Hollow, Ipswich (J Collins, no.4 June '68); Crag sands at Tattingstone (P Grainger, no.4 June'68); Red Crag at Stratton Hall (R Markham no.8 Sept.'70); Pleistocene deposits on Red Crag at Stowmarket (P Grainger, no.9 Jan.'71); Norwich Crag at Southwold, Reydon and Wangford (R Markham, no.10 August'71); Pleistocene at Aldham, Hadleigh (P Grainger, no.10 August'71). Thought-provoking interpretive articles by R Markham include *Fossils from the Gipping Valley Chalk and a note on the zones* (no.2, March'67) and *Preliminary Notes on Coralline Crag from Boreholes between Orford and Aldeburgh* (no.4 June '68) and also M Leeder's *The Systematics of Belemnitella praecursor Stolley and its distinction from Belemnitella micronata senior Schlotheim 1813* (no.5, April'69).

The success of our new web site is very much built on the old one which served us well for 10+ years. Our thanks go to my brother-in-law David Caddick for writing the first version for us and to UKGE Ltd. For hosting it <http://www.ukge.com/>. CM

Sudbury Subsidence

The East Anglian Daily Times 18.02.17 reported a hole in Newton Road, Sudbury caused by a burst water main. It also reported Terrafirma Mines Searches Ltd. of Weston-super-Mare noted former underground chalk extraction, not far away at Maldon Court estate and at Pot Kiln School, Bull Road, had caused subsidence in the 1970s, also that chalk mining was a result of brickmaking. However, referring to Ashley Cooper's book 'Our Mother Earth' (Bulmer Historical Society 1998), he informs us correctly that chalk was extracted in the Sudbury area for lime-mortar and agricultural lime. The Chelsea Spelaeological Society's 'Caves and Tunnels in S E England' includes Pot Kiln School (vol.11; 1982) and Maldon Court (vol.13; 1983). I visited a reported subsidence at Maldon Court on 11.01.77 – I was shown what had been a relatively major fall of Red Crag-type sand from the 'cliff' at the north-west end of the Maldon Court area into the gardens of houses fronting onto Newton Road. RM

Harwich Formation at Shotley



Anne and Dennis Kell of the East Suffolk U3A Geology Group sent me this photo of a temporary exposure of 'London Clay' at Shotley Gate taken on 02.04.17. This plot of land, once occupied by Shotley Lodge and opposite the old piers is under development. The London Clay bedding shows beautifully and there is a fault running from top left to bottom right in the centre of the photo. CM

GeoAnglia

- The **Collections in Colour** exhibition (until 22.04.17) at Hollytrees Museum in Colchester showed one of the pieces of Egyptian Imperial Porphyry found at the site of the Roman Temple of Claudius in Colchester. This rock is an andesite-dacite from Mons Porphyrites in Egypt and has a reddish-purple groundmass with large white/pink crystals. The quarry lies on high ground north of the route between Quena and Port Safaga, but boulders occur lower down on the floor of Wadi Abu Maamel (see article by R Dixon in the Magazine of the Geologists' Association, December 2008). This rock was used for royal sarcophagi and to panel the chamber in which princes were 'born to the purple'. Imperial Rome was the chief consumer of this rock during the reigns of Trajan and Hadrian. And so to Colchester.... RM
- **A Cabinet of Rarities** is an exhibition (Monday-Friday, until 27.07.17) about the collection of Sir Thomas Browne (1605-1682), physician and antiquary of Norwich, at the Royal College of Physicians, Regent's Park, London. In his *Pseudodoxia epidemica* (published London 1646) Sir Thomas questions 'does an elephant have knees?' Later workers in East Anglia answered this by finding fossil knee-caps in the Crag and Forest Bed. He also distinguished between sea urchins ('Echinites') from Chalk ('white, glassy, chalky inside) and from stone (gravel) pits ('hard and flinty') i.e. internal moulds. There is a statue of him on Hay Hill in Norwich. RM

• The Essex Rock and Mineral Society has started a new North Essex Group near to Colchester on the third Thursday of the month. <http://www.erns.org/news.html>