

Welcome to issue number 19 of our GeoSuffolk Times - for those who value Suffolk's geodiversity. Caroline Markham 26.01.14 [www.geosuffolk.co.uk](http://www.geosuffolk.co.uk)

## The Rocks Will Remember

My Grandfather fought in the First World War. I remember him well and, though he was self-effacing and rarely spoke of it, he said that he survived Gallipoli because he was the last officer alive in his unit and the soldiers protected him because he was 'quite good at admin'. (i.e. he managed to get them ammunition and supplies over the field telephone.) He was 27 and a Lieutenant in the 10th Gurkha Rifles. 100 years later, it is incumbent on those of us who remember them to pass on the message of their courage to the next generation.

And what of the future? What better way to ensure these young men are commemorated for hundreds of years (and maybe more) than to inscribe it in stone? I'm sure this was the intention of those who erected the war memorials in the 1920s and 30s, and Bob has been researching the geology of some Suffolk WWI memorials. Barnby is described in this newsletter, with more to follow. CM

## Lines of Defence

Erosion of the cliff south of Martello Tower 'W' at East Lane Bawdsey was the subject of an art project by Bettina Furnée in 2005-6. She used time-lapse photography (from the Martello Tower) and the result has become a film by Tom Sidell and Bettina Furnée. '*Lines of Defence*' makes fascinating viewing at <http://vimeo.com/9448884> - more than 14m of cliff eroded in less than a year. It has a useful link to the individual time-lapse photos.

The Martello Tower (a home) and the two other houses on top of the cliff had sea defences repaired in 2008-9 using imported rock. This work was part funded by local landowners donating plots of land for new housing. Meanwhile, erosion of the cliff south of the Martello Tower has continued apace, giving wonderful sections of Red Crag on London Clay. RM

Britain. One Million Years of the Human Story  
An exhibition at the Natural History Museum, London. 13 February – 28 September.

## Ipswich's Oldest Settlement

RM's record of his town walk to visit former brick yards in east Ipswich with the Ipswich Society in July 2013 is in their October 2013 Newsletter, Issue 93 at <http://www.ipswichsociety.org.uk/newsletter/disptoc.php?issue=193>. The clays in this area were investigated by Ipswich archaeologist Nina Layard at the start of the 20th century. She found fossil elephant bones, a rhino tooth and Acheulian handaxes. CM

## Holywells Park, Ipswich

- Heritage Lottery funded work is underway to restore the ponds of Holywells Park. "Holywells has a number of bodies of open water and would not be here at all if it wasn't for the spring-fed ponds." (*The Angle*, January 2014, Ipswich Borough Council.)
- The Ipswich Star 13.01.14 featured a new version of the Thomas Gainsborough painting identified as 'Holywells Park' by Suffolk historian Norman Scarfe at Agnew's in Old Bond Street in 1991, and then acquired by Ipswich Museum. For the new version a digital image was enlarged and laid on glass for people to paint on top. But is the painting of Holywells Park? When the Museum acquired it, I with another science member of staff compared the topography with that of an OS map, and it certainly did not appear to be Ipswich. But whatever it depicts, have a look at the original and new versions in the Wolsey Art Gallery at Christchurch Mansion - well worth a visit. RM

## Peter Underwood Remembered

A *Cercidiphyllum* tree in memory of Peter has been planted at St Aidan's Episcopal Church, Gresham, Oregon, USA, of which Peter's sister is a member (from the Ipswich Society Newsletter January 2014). *Cercidiphyllum* wood is well known from our Suffolk London Clay, a deposit Peter knew well (see GeoSuffolk Times no.15). RM

**The Essex Gem and Mineral Show** is on Saturday February 15th at North Romford Community Centre, 10am-4pm. See <http://www.erms.org/our-show.html> for details.

## News: Geodiversity Providers and Owners

Indian Rocks and Fossils in Suffolk

Wednesday 30th October was 'India Day' for GeoSuffolk at Ipswich Museum when Bob and Caroline demonstrated some of the Museum's collection of Siwalik Hills fossils – its elephants, hyaenas and gazelles (but not the gharials) being close to our Suffolk Pliocene fauna. They were collected by Suffolk-born (1802) Proby (later Sir Proby) Cautley when he was involved in the construction of canals in the Sewalik Hills of India. Another Indian specimen demonstrated was flexible sandstone (most people had never seen a bendable rock before!). Interestingly, the piece on flexible sandstone (under 'Itacolumite') in the Encyclopaedia Britannica was written by Suffolk-born geologist Percy Boswell.

We also demonstrated examples of Makrana Marble, brought back from our visit to Agra. The Taj Mahal is made of Makrana Marble, and our rock was popular with visitors. RM

Vegetation Stripes at Knettishall Heath CGS

CM's article of this title reports the findings of the GeoSuffolk dig at the Suffolk Wildlife Trust reserve in June 2013. It was published in the Newsletter of the Suffolk Naturalists' Society, *White Admiral* 86, Autumn 2013, which is on their website at <http://www.sns.org.uk/files/pdfs/wad86.pdf>

The Suffolk Geocoast

The SNS also publishes its annual Transactions, *Suffolk Natural History*. Dr Roger Dixon's third article in his Suffolk Geocoast series 'Dunwich: Suffolk's lost city – a Geotour' is in the newly published Volume 49 (2013) and chronicles the geology, coastal processes and erosional history of this charismatic locality. Accompanying it 'Greyfriars, Dunwich – Coralline Crag in action' by the same author is an account of the recent repairs to the Greyfriars boundary wall using Suffolk's unique local building stone, as reported in GeoSuffolk Times no.17.

Back copies of *Suffolk Natural History* are on the SNS website and Dr Dixon's first two Suffolk Geocoast articles 'Bawdsey East Lane to the Manor' (Vol. 47) and 'The London Clay at Nacton and Harkstead Shores' (Vol. 48) can be found at [http://www.suffolkbrc.org.uk/public\\_html/node/76](http://www.suffolkbrc.org.uk/public_html/node/76)

Copper Minerals at Ipswich Museum

On Saturday March 22nd GeoSuffolk will be demonstrating some of the Museum's collection of Copper minerals as a contribution to National Science Week. 10 – 12 and 2 – 4.

Barnby World War One Memorial Cross

The cross at Barnby, east of Beccles, is of grey Aberdeen Granite. It is next to the main A146 road, but is more easily (and more safely) viewed from the road within the village. Its constituent minerals may be seen to be quartz (colourless), feldspar (white) and mica (dark). The rough-hewn lower part of the memorial shows lighter 'bands' on the west side, whilst the shaft of the cross has sub-polished flat surfaces, with darker streaks on the north side. Uranium-lead dating using monzanite (phosphate of the cerium metals, mostly with thorium present) has given an age of 470±1 million years for the Aberdeen Granite. RM

Festival of Geology

In November GeoSuffolk took Suffolk's Geocoast to London with a display at the Geologists' Association Festival at University College London. Our stand highlighted the 40 designated geological sites (21 SSSIs and 19 CGS) in the Suffolk Coast and Heaths AONB. Sites featured included the Norwich Crag gravel cliffs at Dunwich Heath and the Red Crag pit in Butley Forest. CM

Sea-dredged Aggregate

Since August 2013 several trainloads of sea-dredged aggregate, usually from an area off Corton and Great Yarmouth, have been despatched from Brett's Ipswich terminal (Griffin Wharf on the West Bank) to London Concrete, Battersea (Ipswich Transport Society Journals October 2013 and January 2014). Unexpected specimens sometime turn up in dredged material; in 1990 I was shown some *Venericor* (bivalve mollusc) specimens 'dredged off Felixstowe'. They closely resembled fossil shells from the Bracklesham Beds of Sussex, although a related fossil species has been recorded (*Proc. Malac. Soc.* 16: 1925) from Margaretting railway cutting in Essex. RM