

Keep in touch with GeoSuffolk Times. Welcome to issue number 11 of our newsletter - for those who value Suffolk's geodiversity. Caroline Markham 13.01.12 www.geosuffolk.co.uk

A Measure of Suffolk

What do you use as a scale in your scientific photographs? Do you always have a centimetre scale or tape measure with you? A quick glance at some of my photographs shows a good variety of 'scales'! A geological hammer at Tattingstone Hall crag pit, a spade at a 'dig' at Battsford stone pit, a trowel at Chillesford Church pit. One Chillesford face was scaled by an orangeade bottle! People in a photograph (e.g. Covehithe cliff) are great but yesterday's fashions may vie for interest with the rock; maybe just a hand will do e.g. next to a whalebone at Holton gravel pit. Cockle shells have been used at Wangford gravel pit and a pen at Aldeburgh Brickworks. Coins can be good for close-ups but that 10p piece at Aldeburgh pit is the original size (today's 10p pieces are smaller). What will you be passing to the future to enjoy or puzzle about in your Suffolk photographs? Bob Markham (RM)

GeoSuffolk Notes

GeoSuffolk has helped with several events during 2011 (see especially GST no.10). There is always some preparation involved and RM has recorded much this in his *GeoSuffolk Notes* series. Four from last year have been put onto www.geosuffolk.co.uk :

- 15. Christchurch Park
- 16. St. Peter's Church, Ipswich
- 17. Echinoids
- 24. Coprolite Street CM

Frederick Harmer

Frederick Harmer is well known to geologists for his work on the Crag deposits and their fossils. *GeoScenic*, the British Geological Survey's photographic archive, contains photographs from the Frederick William Harmer collection - <http://geoscenic.bgs.ac.uk>. Most have minimal information, which may easily be added to; here are two to start with:

P680271 is Bentley, Suffolk, showing Percy Boswell sieving Red Crag.
P680273 is Red Crag at Little Oakley, Essex and shows Harmer's car. RM

Have you visited Ipswich Cornhill?

On market days the Cornhill is a riot of colour and noise from the stalls and bustling shoppers. This might also be a good time to visit the exhibition galleries in the Town Hall, noticing the splendid red granite columns inside the entrance hall. Outside, the Town Hall shows the remains of deserts and of sea-beds in its building stones. The columns are of Mansfield Stone, a red sandstone originally deposited about 220 million years ago (Triassic age) when the area of Britain was largely desert. There is some flaking of the upper parts, perhaps due to wash-off from limestone but it may happen if the long axis of the column is nearly parallel to the rock's original bedding. The building's orange-brown limestone is Bath Stone, about 170-175 million years old (Jurassic age), whilst just above pavement level the white limestone is Portland Stone (about 145 million years old).

To feel even closer to the Jurassic sea, cross the Cornhill to the side of the Nat West Bank – here the fossil oyster shells in the Portland Stone are more resistant to weathering and stand proud of the surface.

For something quite different go into the Tower Ramparts shopping centre. Most of the floor is light-coloured Botticino marble from Italy, but more conspicuous is green 'Verde Issorie' serpentinite ('serpent-like') rock from the Val d' Aosta in the Italian Alps. It is composed of iron-rich minerals and has been fragmented by earth-movements. It weathers rapidly outside and is thus used mainly in interiors. RM

Essex Gem and Mineral Show

This is well worth a visit – at North Romford Community Centre, Collier Row, on February 18th – see www.erms.org for details

A Celebration of Suffolk Geology is on course for publication at GeoSuffolk's 10th AGM on May 12th 2012. Thank you to all contributors, both academic and financial and especially to editor Dr Roger Dixon.

News: Geodiversity Providers and Owners

Science Day at Ipswich Museum 10.03.12

The Museum will be hosting a 'Dinosaur Star Show' - a giant blow-up planetarium 'taking a journey back to the time of the dinosaurs'. See www.cimuseums.org.uk/whats-on.html for more information. GeoSuffolk will also be there, looking at space rocks and with a special look at the Asteroid Belt with its many and varied worlds and their often exotic names. RM

Knettishall Heath CGS

Knettishall Heath has been called the best example of periglacial patterned ground in Breckland. The alternating chalky and sandy stripes were produced by cryoturbation during the last cold phase about 15,000 years ago. Today they are picked out by contrasting vegetation, forming linear patterns over large areas of the Country Park which is at present leased and managed by Suffolk County Council. The Suffolk Wildlife Trust is looking to buy Knettishall Heath and has received a substantial HLF grant towards the costs, but more money is needed.....see www.suffolkwildlifetrust.org CM

County Geosites (CGS)

During 2011 GeoSuffolk undertook Condition Monitoring visits to 7 of the 13 Public CGS designated at the start of the year. Wantisden Church, Sutton Church and Chillesford Church (landowner Church of England); Newbourne Springs and Great Pit (SWT); Westleton Heath Pit (RSPB); Butley Forest Pit (Forestry Commission) all scored GOOD on the Condition Monitoring Form. This information has been given to Suffolk County Council for inclusion of the Defra Single Data List 160-00 for Suffolk Local Sites and also to Natural England via the Geology Trust database. Details of these sites are in *Earth Heritage Suffolk*. Suffolk is lucky to have such a large number of important geosites with public access and landowners who maintain them so well. CM



Coralline Crag blocks in the tower of the Church of St. John The Baptist, Wantisden

Coprolite Street

The Festival of Geology on November 5th 2011 was hosted by the Geologists' Association at University College London. GeoSuffolk's stand *Coprolite Street* took a look at an almost forgotten industry of Victorian Suffolk. Coprolite stones, discovered at the base of the Red Crag by John Stevens Henslow whilst on holiday at Felixstowe in 1843, were found to be rich in phosphate and became the basis of the local fertiliser industry. Our stand featured old photographs e.g. of Edward Packard's fertiliser factory in Ipswich; a reproduction of the 'Coprolite Window' in Waldringfield Church (which was restored using money from the coprolite quarrying industry in the parish); a 'pick your own' coprolite pile from a contemporary Red Crag pit. Of course we still have the real Coprolite Street in Ipswich where the factory stood and now the address of University Campus Suffolk. For more information see GeoSuffolk Notes no.24 www.geosuffolk.co.uk. CM

Claude Read

Claude Read, farmer of Chillesford, died in October 2011. He was a good friend to geologists (as are so many Suffolk farmers), he and his family giving permission to visit their classical pit (an SSSI) in the Chillesford Beds. I first met him in the late 1950s and have many happy memories of him with his tractor! RM

Dunwich: Learning for the Future from our Past

An excellent seminar hosted by Dunwich Museum on 21.10.11, this brought together Dunwich residents with academic geographers and local environmental specialists. The presentations are on the Dunwich Museum web site www.dunwichmuseum.org.uk/library/list.php. Look out particularly for:

- *Cliff retreat: rates and mechanisms* by Dr Sue Brooks of Birkbeck University of London which has a useful analysis of erosion of the cliffs at Covehithe.
- *Dingle Marshes NNR* by Alan Miller of SWT for spectacular photos of the marshes inundated by sea water.
- *Dunwich: The Geology of Suffolk's Lost City* by Caroline Markham of GeoSuffolk which has an unusual photo of Norwich Crag fossil molluscs from an offshore borehole, plus several of the Norwich Crag gravels (Westleton Beds).
- *Managing Coastal Processes and Change* by Gary Watson of the Environment Agency, for graphs of erosion/accretion trends along the Suffolk coast. CM