

Keep in touch with GeoSuffolk Times. Welcome to issue number 10 of our newsletter - for those who value Suffolk's geodiversity. Caroline Markham 06.10.11 www.geosuffolk.co.uk

Book and Forest

Quality and innovation are attracting financial support for GeoSuffolk. Our 10th Anniversary Volume – *Celebrating Suffolk's Geology* – is well on course for publication next year. Editor Roger Dixon has received many of the promised articles – it's a mouthwatering selection. Generous grants towards publication costs have been received from a number of organisations – thank you all. And there's more good news. GeoSuffolk's 'Pliocene Forest' project, overseen by Barry Hall, has recently received another major donation – again thank you very much! Bob Markham (RM)

GeoSuffolk helps with North Sea research

In September Roger and Rosie Dixon visited the National Oceanography Centre at Southampton University to assist Drs Justin Dix and Fraser Sturt with southern North Sea core sample interpretation. This followed summer visits by the researchers to Suffolk to examine Plio-Pleistocene field locations. Roger and Rosie were given a tour of the Southampton facilities, including the vast core store. Further details of the centre can be found on their website: www.noc.soton.ac.uk R Dixon

Australian Opals Exhibition at Sudbury

John and Leisha Wheeler, Opal specialists from Australia, again brought a large selection of Opals and Opal jewellery to Jonathan Lambert Fine Jewellers of Sudbury, from 28th September to 1st October. There were splendid specimens of Lightning Ridge Opals and Queensland Boulder Opal. RM

UKGAP

The UK Geodiversity Action Plan is online at www.ukgap.org.uk/. The website "provides a place to demonstrate and report on the range of activities that are being undertaken at all levels across the UK to deliver the shared objectives of the UKGAP."

GeoSuffolk is used as an exemplar for six of the objectives – see www.ukgap.org.uk/getting-involved/organisations/geosuffolk.aspx CM

Have you visited Nacton cliff - London Clay, lithologies and landslides? A County Geosite

A walk along the wooded London Clay slopes and shores of our south Suffolk estuaries is always a pleasure in autumn and at Nacton you can see the best exposure of London Clay in Suffolk. Park at the Nacton Shore picnic site car park at TM 219391 and the cliff, about 1km long, starts about 500m to the east along the shore. Do check the tides before starting; it is not accessible at high tide.

The London Clay at this locality belongs to the Harwich Formation and was deposited in a marine environment about 55 million years ago. Some of the clay layers have been cemented by lime to form harder 'septaria' (often with calcite veins). Look for the thin yellow bands of decomposed ash from erupting volcanoes in Ireland and Scotland at this time. Try to find one of the faults which dissect the strata at intervals. The faults cut through the clay and ash bands cleanly, but the harder 'septaria' mudstones are bent, thinned and shattered. Erosion by the river at the base of the cliff has produced a series of rotational slips in the London Clay, with evidence of old slips, to be seen on the shore where mudstone bands emerge standing on end from the beach material. CM

New 'Pliocene Forest' Board at Sutton

Walkers on the footpath passing by Rockhall Wood SSSI, Sutton, can see GeoSuffolk's new panel about the trees in the 'Pliocene Forest'. This innovative project interprets the fossil pollen from Suffolk's Coralline Crag. The 'forest' is on private ground, but is easily viewed from the footpath near the board. The panel can be downloaded from the GeoSuffolk web site. CM

Visit GeoSuffolk at our *Coprolite Street* themed stand at the Geologists' Association Festival of Geology. Saturday November 5th at University College London. See www.geologistsassociation.org.uk/ for details.

News: Geodiversity Providers and Owners

Heritage Open Day September 10th

The GeoSuffolk stand at St Peters Church, Ipswich, at this event co-ordinated by the Ipswich Society, had an information sheet about building stones. Inside the church the magnificent square bowl of the C12th font is of black Carboniferous Limestone, often known as 'Tournai marble', from Belgium. Outside the church, the Portland Limestone descriptive tablet on the wall at Cardinal Wolsey's Gateway has considerably weathered since it was placed there in 1954. RM

Echinoid Day at Ipswich Museum

GeoSuffolk members joined Ann Ainsworth at the Museum on September 17th for this 'sea-urchin' day. Making model echinoids was a great hit! A selection of the fossil echinoid collection was shown in a special display: prominent were the giant *Clypeaster* urchins from Malta, donated by Sir Richard Wallace, former President of Ipswich Museum, but perhaps better known for the Wallace Collection in London. RM

Dunwich Leaflet

GeoSuffolk's leaflet *Dunwich: the geology of Suffolk's lost city* has been updated and reprinted thanks to a grant from the Suffolk Coast and Heaths AONB Connect Fund. GeoSuffolk also put a portion of the money from the Dunwich and Westleton WEA class they ran at Westleton Common last April towards this project. The new leaflet has already been widely distributed in the Dunwich area and copies are available at Ipswich Museum, or download from the GeoSuffolk web site. A big thank you to all who contributed. CM

Pebbles on the Heath

On Tuesday 18th October, at the invitation of Natural England, GeoSuffolk is leading a walk to study the Norwich Crag gravels at Westleton Heath, as part of the Woodwose Festival. Meet at Westleton Heath NNR car park, TM 459696, at 10am for a 2-3km morning walk. Book on 01728 453637 or use www.woodwose.org/

Linking Landscapes

GeoSuffolk will have a stand at this Suffolk Naturalists' Society Conference on Saturday October 22nd at the Seckford Theatre, Woodbridge School. Speakers include Richard Mabey, Chris Baines and Oliver Rackham. The conference is open to all – tickets £12.50 - visit www.boxvalley.co.uk/nature/sns/org/conference.asp for more details.

Military Open Day at Sutton

Rock Barracks, Woodbridge Airfield, is home to the Army's 23 Engineer Regiment (Air Assault). The 'Open Day' on September 3rd enabled visitors to see the memorial to commemorate those Royal Engineers who helped to liberate Norway from German occupation in 1945. Unveiled on July 23rd 2011, its base includes carved granite blocks showing their feldspar, quartz, and black (ferromagnesian) mineral. It was reported that the granite was quarried during the Second World War and was intended for a monument in Berlin.

A photographic record of today's Engineers 2010-2011 tour of Afghanistan was of geological interest. Work on maintaining water supply in the Helmand Valley including stopping the river eroding an artificial canal embankment; road upgrading used locally sourced aggregate.

And *Rock Barracks*? Not geological, but named after Lt Col. John Rock, founder of Airborne Forces, World War 2. RM

Dunwich Museum

There is much of geological interest in this museum and there is still time to visit before it closes for the winter at the end of October – see www.dunwichmuseum.org.uk.

The display explaining the Dunwich 2008 project is well worth a look. The project's aims are to create an underwater map of the seafloor off Dunwich. The geophysical survey was conducted by EMU Ltd under the leadership of David Sear (University of Southampton) with Stuart Bacon of Orford (Suffolk Underwater Studies) as advisor. Sidescan SONAR and Acoustics Boomer System were used to map up to about 1km off shore. Maps of the St Peters Church and St Nicholas Church areas are shown on the final panel.

Also in the Museum are several early 20th century photos of the cliffs and prints of earlier art work including Turner's *Dunwich, Suffolk* painted in 1830. Large copies of this are on sale at the museum for £8.95.

At the foot of the stairs is a case with Norwich Crag vertebrate fossils, including an elephant scapula. CM

Little Hall, Lavenham

An article by Ted Ingleby in *Suffolk View*, Spring 2011, adds geological interest to timber-framed and plaster buildings. The 'yellow' colour of Little Hall, Lavenham (offices of the Suffolk Preservation Society) is made up with natural rock pigments Yellow Oxide, Red Oxide and Black Oxide (all iron oxides) mixed with a limewash (a suspension of slaked lime in water). RM