

Welcome to issue number 20 of our GeoSuffolk Times - for those who value Suffolk's geodiversity.  
Caroline Markham 29.04.14 [www.geosuffolk.co.uk](http://www.geosuffolk.co.uk)

## Losing Suffolk

It is not only physical processes that erode Suffolk, but also political, with Norfolk having gained land south of the rivers Little Ouse and Waveney. Thetford St Mary was once within Suffolk, with St Mary's church having columns made of large blocks of chalk from a former pit 1¼ miles east of Santon Downham. We lost the white cliffs (now graded and grassed over) of Gorleston to Norfolk under the Parliamentary and Municipal Reform Act of 1835. More recently the Local Government Act of 1974 passed more to our northern neighbour, including the gravel pit at Burgh Castle. The north (coastal) piece of Corton (which had a boundary with Gorleston) was incorporated with Hopton, which then became 'Hopton on Sea', gained white cliffs (of Corton Sands, the fossil shells from this stretch having usually been labelled 'Hopton!'), and passed to Norfolk. Bob Markham (RM)

## More on Burr

In *The Millwrights* by Bob Malster, Suffolk Review, Spring 2014, we learn that William Bear of Sudbury and Ipswich was, in 1875, an importer and dealer in French burrs and a manufacturer of burr millstones. Also see Meulières in GeoSuffolk Times no.16 for more details on burrstone. RM

## Burrow Hill, Butley

Various recent publications have called it a 'burial mound covering a Danish ship' and 'a drumlin formed at the end of the Ice Age'. Much more likely (!) is of course that it is an 'island' (inlier) of older rock (sand) surrounded by more recent marsh deposits. Similar 'islands' front the old cliff line between Hollesley and Alderton, at Oxley House, Shingle Street and Buckanay Farm. RM

## Pliosaur Erratic

John Lambert is opening his Larks Hill garden at Tuddenham St Martin on May 10th, June 14th, July 12th and August 10th under the National Gardens Scheme. On sale will be a booklet *The Old Fossil Story*, about a Pliosaur limb bone erratic found in an excavation in the garden. RM

## Pliocene Forest Open Day

As part of Sutton Village Open Gardens event 2014 GeoSuffolk welcomes you to our Pliocene Forest, on Sunday June 15th from 12 noon to 5pm.

- Celebrate with us 5 years of this imaginative interpretive venture from its inception in 2009, with a grant from the Curry Fund of the Geologists' Association.
- Learn about Suffolk's unique rock, the 4 million year old Coralline Crag with GeoSuffolk geologists on site to explain the exposures at this SSSI.
- Review the development of this site from Victorian times in our GeoSuffolk scrapbook.
- Read our newly refurbished and updated information panels – one about the Coralline Crag exposures and one about the Pliocene Forest.
- Walk amongst the 150+ trees in the enclosure – all present in the fossil pollen record of the Coralline Crag – and talk to GeoSuffolk's tree specialist about sourcing the living representative genera from all over the world.
- Discover the wealth of plant biodiversity in this area in the Pliocene - subsequently destroyed by the Ice Age - in our new *Pliocene Profiles* booklet.

Entrance tickets to the Open Gardens will be sold at the Sutton Memorial Hall IP12 3JQ, where copies of the garden route will be available. Cream teas will be available from 3pm at The Old Vicarage. CM

## Glasgow's Fossil Grove

Congratulations to Ann Ainsworth on her new post at Kelvingrove Museum in Glasgow. During her time at Ipswich Museum, Ann became a Suffolk geology enthusiast and was a keen supporter of GeoSuffolk. She now has much Scottish geology under her charge including the Fossil Grove in Victoria Park, a cluster of eleven *Lepidodendron* stumps in their growth position excavated from Carboniferous sands and shales - somewhat older than our Pliocene Forest! CM

## **Pliocene Forest Open Day**

15th June 2014 - 12noon to 5pm

Part of the Sutton Open Gardens

Event – for updates see

<http://sutton.onesuffolk.net/home/events/sutton-open-gardens/>

## News: Geodiversity Providers and Owners

Copper and Copper Minerals at Ipswich Museum

On March 22nd GeoSuffolk members manned this public demonstration for National Science Week 2014. One of the specimens of Atacamite (a copper chloride, containing 59.4-5% copper) was donated to Ipswich Museum by the Rev. Daniel Greatorex (1829-1901), East End social reformer and local philanthropist, of St Paul's Church, Dock Street, London Docks. He was also a keen traveller, including visiting Australia, where he obtained this specimen from the Burra Burra copper mines, north of Adelaide in South Australia. The mineral was discovered there in 1845 and large amounts were mined until the exhaustion of the deposit in 1877. Another exhibit was Powder for Bronze, of 90% copper and 10% tin, which forms Bronze when alloyed, and as used by Manganese Bronze Company in Ipswich. RM

Fossil Crinoids at Ipswich Museum

On Saturday July 19th 10am-12noon and 2pm-4pm, GeoSuffolk members will be demonstrating some of the Museum's collection.

Gedgrave Cliff SSSI

It is good to see our SSSIs being cared for - Natural England refreshed the exposure of Coralline Crag at Gedgrave Cliff in March this year. Gedgrave Cliff is part of the wider Alde-Ore Estuary SSSI and its geology is described in the citation which you can find on the NE web site at [www.sssi.naturalengland.org.uk/special/sssi/search.cfm](http://www.sssi.naturalengland.org.uk/special/sssi/search.cfm) CM

Suffolk Institute of Archaeology and History

The SIAH Proceedings are now available at <http://suffolkinsttute.pdfsrv.co.uk/>. Dating from 1848 the archive contains much of geological interest, e.g. Nina Layard's 1910 article on the Stoke Tunnel Beds (the Institute was then of 'Archaeology and Natural History'). RM

Cavenham Heath Open Day September 6th

This is a Suffolk Geodiversity Site showing a flat sheet of river terrace gravel above the present floodplain; it contains a flora and fauna with arctic forms, and a sample of moss has been dated to about 26,870 years ago. There is a strong back feature against a higher terrace. Cavenham Heath is also a National Nature Reserve, an SSSI, part of Breckland's Special Area of Conservation, and part of the Breckland Special Protection Area under the European Birds Directive. RM

Bedfield World War One Memorial Cross

The cross in the churchyard at Bedfield, north-west of Framlingham, is of Cornish granite. Its constituent minerals are well seen on the back of the memorial, especially the white feldspar crystals. Micas are prominent, together with the quartz. RM

The Geology of the Western Front

The geology and topography of the battlefields of France and Belgium had an important role in determining the character and the outcome of many of the WWI battles. If you are enjoying RM's notes on Suffolk WWI war memorials, you might be interested in Geologists' Association Guide no.61, *The Geology of the Western Front* (1999) by Peter Doyle. See [www.geologistsassociation.org.uk/guidesales.html](http://www.geologistsassociation.org.uk/guidesales.html) CM

GeoAnglia

- Martin Warren has added a new venue *Sidestrand and Trimmingham* to his geology walks in North Norfolk. Glacial deposits, Cromer Forest Bed, Wroxham Crag and Chalk are all exposed in these spectacular undefended cliffs. For dates, times and prices see [www.norfolk.org.uk/geology.html](http://www.norfolk.org.uk/geology.html)
- Cambridge University is offering a weekend geology course on June 6th-8th *Rocks Minerals and Fossils, an Introduction to Geology*. This is an opportunity to study many different rocks, minerals and fossils and includes a field trip. See [www.ice.cam.ac.uk/component/courses/?view=course&cid=10082&ref=rocks](http://www.ice.cam.ac.uk/component/courses/?view=course&cid=10082&ref=rocks) CM