

Welcome to issue no.36 of GeoSuffolk Times – for those who value Suffolk's Geodiversity. Caroline Markham 08.04.18 www.geosuffolk.co.uk

<u>What is Native?</u> There are two 'time gardens' (term from Ronald

Blythe, New York Times Magazine 15.03.1987) we may visit to answer this. The Geraldine Mary Harmsworth Park, Southwark, (Ice Age Tree Trail http://www.southwark.gov.uk/parks-and-open-spaces/park-trails) has 34 species of trees which colonized Britain after the ice started to melt and before the country became an island – thus birch, oak and ash for example are native. The Cambridge University Botanic Garden Chronological Bed has plants introduced into Britain by humans, directly or

So how to view GeoSuffolk's 'Pliocene Forest'? The trees are native genera, such as spruce (i.e. living here 4 million years ago), but many have to be represented by (living) non-native species. The site is surrounded by crops, such as potatoes (also non-native). With care, impact on 'native species' should be limited to the locality.

Bob Markham (RM)

indirectly - non-native species such as wallflower - in

Every two years Sutton village opens its gardens to the public and this year the event is on June 10th from 12noon – 5pm. GeoSuffolk will again be adding its 'Pliocene Forest' to the list of open gardens in the parish – a wonderful opportunity for everyone to visit this imaginative interpretation of the flora of our pre-lce Age 'Paradise Lost'. Watch for updates on our web site events page and the Sutton village web site. http://sutton.onesuffolk.net/home/events/view/147

Meet GeoSuffolk at:

the 'great reshuffling'.

- Ask the Expert at Ipswich Museum April 11th 10.30 3pm
- Fantastic Fossils at Colchester Natural History
 Museum April 11th 10-12 and 2-4pm
- Wild in the Stour Valley Family Activity Day, Croft Road, Sudbury June 1st 11am-4pm:
- Pliocene Forest Open Day, Sutton June 10th 12noon -5pm

GeoSuffolk is on Facebook and Twitter – find us at: https://www.facebook.com/GeoSuffolk
https://twitter.com/geosuffolk

General Data Protection Regulation

GeoSuffolk is writing its Data Protection Policy in line with the new GDPR which comes into force on May 25th - a privacy notice for all GeoSuffolk Times recipients has been posted on our web site. http://geosuffolk.co.uk/index.php/archive/geosuffolk-times

Mud-larking in Sudbury

On March 19th GeoSuffolk was checking out the Sudbury area for evidence of old Chalk and other exposures. Most have now been built on, but it was a sunny day with minimal vegetation due to the long winter and we caught a few glimpses of geology behind the housing. The highlight was our discovery of a good exposure of the Hoxnian Interglacial bed in Little Cornard brick pit (photo below). With kind permission of the owner and much mud-wading (exacerbated by melting snow!) we identified this, finding the characteristic freshwater mollusc fossils, and taking photographs and samples for micro-fauna testing away with us.



A visit to the Sudbury Heritage Centre revealed an excellent photo archive, containing several of geological interest. These include 'Percy Jordan's workers at Brundon Lane pit' (interglacial site) and 'Jordan's Waldingfield Road pit' (Tertiary on Chalk). Find them online in the 'Business and Industry' section at www.sudburysuffolk.co.uk/heritage. There are also photos of Ballingdon Grove and Little Cornard brick pit in the Geologists' Association Carreck Archive at https://pubs.bgs.ac.uk/publications.html?publD=GA00 pages 53-59.

John Fairclough 1942-2018

John was Suffolk Museums Education Officer from 1972 to 1995. He came from a Classics background (Oxford University) and published locally on archaeological subjects. I worked with him on geology projects and activities for children at Ipswich Museum. One important project was the fossils and rocks loan boxes for schools - a very successful and useful scheme. John also ran a popular museum club for children. On one occasion we arranged for the youngsters to sieve fossiliferous deposit from Bobbitshole SSSI, Ipswich - mud and water almost everywhere, and then a schools inspector arrived! In his usual unflappable manner, John explained that the children were working on a research project, finding Ipswichian Interglacial (type site) fossils for the museum collection – real original work. RM

Wroxham Crag near Bungay?

A seven-author paper on the Waveney Valley terraces in the Earsham area appeared in the Proceedings of the GA for February 2018. Boreholes recorded Wroxham Crag with shells, resting on an earlier deposit (Norwich or Wroxham Crag?). In 1967 I recorded at nearby Broome - Valley Gravel with mammoth resting on stony and shelly Norwich Crag (dredged from below the water table). Ipswich Geological Group Bulletin no.2 March 1967, pp 12-13 http://geosuffolk.co.uk/index.php/archive/ipswich-geological-group. In the same Bulletin see also 'Upper Pleistocene Mammals of Norfolk' for Earsham specimens.

Paragon B391

is a jackup offshore gas drilling platform in port (since August 2017) at Parkeston Quay, Harwich. From March to June 2017 it was working in the Viking Gas Field in the southern North Sea, where the gas reservoir is in the Permian age Rotliegendes Sandstone at a depth of c. 8,500 feet. The hydraulic fracturing technique (fracking) is used in the southern North Sea to release gas from the rocks.

De magnete

was written in 1600 by physician Dr William Gilberd (1544-1603), born in Colchester. His experiments concluded that the Earth is a magnet, this being the reason a compass pointed north, and argued that the centre of the Earth is iron. There is a painting by A A Hunt of Dr Gilberd showing his experiments on static electricity to Queen Elizabeth – see it in the Wunderkammer at the Firstsite art gallery in Colchester.

Geology Gallery Reimagined

The Suffolk Geology Gallery display at Ipswich Museum, created by GeoSuffolk's Chairman in the mid-1980s had languished since its information panels were removed in 2004, nearly a decade after RM's retirement. So many beautiful Suffolk specimens, but how to interpret them? A GeoSuffolk letter to the Museum in 2016 asked for information about the cases to be provided and resulted in the Geology Gallery Re-interpretation Project Plan devised by curator Damian Etherington. Soon after, earth scientist Dr Kate Riddington joined the museum staff and with RM's assistance she has turned the plan into reality. The gallery re-opened to the public at the start of March - a wonderful example of what can be achieved with a low budget.

Extra space for viewing steps means fewer cases and fewer specimens, but KR has retained the 'best of the best'. Meet up again with the large (oak-like) fossil leaf from Bawdsey in the Eocene case and the stunning bivalve moulds in a Coralline Crag block from Sudbourne (photo below). These last are in a case about our Chairman – yes he has his own case!



The elephant evolution case holds two more favourite fossil 'gems' - a *Mammuthus rumanus* tooth from the Red Crag at Falkenham and a tooth from Hoxne, the Hoxnian straight-tusked elephant. Still on display is the Woolly Rhino jaw from Needham Market that appeared on Blue Peter with RM - plus hundreds more top quality specimens.

There is new material to see - KR was allowed a few additions from the store. George Slater's scale model of the Dales Road brickworks in Ipswich (see GeoSuffolk Times nos. 18 and 24) is in a case dedicated to him. There is a chunk of indium, which enables our modern penchant for touchscreen technology, a fine Triassic ceratite from Germany in the evolution display, and the lower jaw of a Miocene Nesodon - one of the Patagonian extinct mammals. For me as a teacher, the cases devised with the Science National Curriculum in mind are the best addition. The fundamental questions - 'What is a rock?' and 'What is a fossil?' are answered and our Suffolk fossils are used to illustrate aspects of evolution such as adaptation and variation. CM