

GEOSUFFOLK TIMES

Newsletter 43
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The Quarry at Rockhall Wood SSSI

Welcome to issue no.43 of GeoSuffolk Times.

Caroline Markham 19.01.20 www.geosuffolk.co.uk

Ten Years Without a GAP

Some ten years ago GeoSuffolk went a different way from much of the country in deciding not to have a Geodiversity Action Plan (GAP). Our consultations showed that people needed information before action, hence our handbook, *Earth Heritage Suffolk* by Bob and Caroline Markham, 2010, for geodiversity providers and users. The second part of our 'Geodiversity Action Pack' is *GeoSuffolk Times*, our quarterly newsletter reporting results and actions. This approach has worked well, and I thank all those who have contributed. For the next ten years, we ask ourselves how we can do even better. Happy 2020s!

Bob Markham (RM)

Suffolk Coast and Heaths AONB at 50

Wednesday 4th March 2020 marks the 50th Anniversary of Suffolk Coast and Heaths designation as an Area of Outstanding Natural Beauty. Join GeoSuffolk and the AONB volunteers at our next SCH AONB volunteers' work party on March 10th, helping to clear the Coralline Crag at Sudbourne Park SSSI (<https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1001649>). If you would like to take part, please register using the SCH AONB website <http://www.suffolkcoastandheaths.org/assets/Uploads/2019-09-SCH-Vol-Tasks-Poster-Oct-19-to-Mar-20.pdf> RM

Elizabeth Cobbold

RM's research on Ipswich's Georgian geologist, including a list of her specimens figured by Sowerby (see GeoSuffolk Times 42) has been put onto the GeoSuffolk web site now as GeoSuffolk Notes no.70 at <http://geosuffolk.co.uk/index.php/archive/geosuffolk-notes>

Suffolk Jurassic

Two of the specimens brought into the October 2019 *Ask the Expert* day at Ipswich Museum were the Jurassic bivalves *Ostrea delta*, from South Elmham, and *Camptonectes*, from Swilland, both erratic fossils from Suffolk's glacial deposits. A plesiosaur vertebra from Creting St Mary (and other Jurassic fossils) figure in GeoSuffolk's *Erratics* leaflet (<http://geosuffolk.co.uk/index.php/archive/geosuffolk-leaflets>). Part of a pliosaur mandible with tooth sockets found at Westhall in 1962 is in Ipswich Museum. I found my first ichthyosaur vertebra at Mason's Pit in Great Blakenham in 1957 and many other reptile bones, ammonites and belemnites were found in the 'clay pit' (glacial deposits) there, including by Blue Circle employees Wilfred Read and Carter Watchman. RM



Camptonectes identified by GeoSuffolk 23.10.19

Spring 2020 meet GeoSuffolk and show us your finds:

- February 19th and April 8th *Ask the Expert* at Ipswich Museum from 10.30 - 3.30.
- April 17th *Fantastic Fossils* at Colchester Natural History Museum from 10-12 and 2-4 <https://colchester.cimuseums.org.uk/events/fantasticfossils/>

Happy 10th Birthday Pliocene Forest

To mark 10 years since its opening at Rockhall Wood SSSI in Sutton, *GeoSuffolk Times* this year will feature articles by Barry Hall highlighting some of the specimens in GeoSuffolk's Pliocene Forest, planted with genera from the fossil pollen record of the Coralline Crag. CM

Pinus banksiana

Recent conflagrations in Australia set me thinking about evolutionary adaptations to this quite common event especially with regard to the trees now thriving in the Pliocene Forest at Sutton Knoll. With forebears most probably growing around the Northern hemisphere in Pliocene times, circa 4mya, our *Pinus banksiana*, Jack pine, still has a huge range in Canada and in the United States. Fortune, in the form of natural genetic modifications, has favoured our specimen pine with certain characteristics that have aided survival, most particularly of wildfires. Cones are small, 3-5 cms long, and are serotinous, an adaptation whereby seeds are released in response to an environmental trigger rather than maturation, in this case extreme heat, 50°C. Jack pines also naturally self-prune lower branches which otherwise would form a 'ladder' of fire up the trunk. Fire physics are counter-intuitive: a quick hot burn less damaging than a prolonged 'cooler' fire. Also, the bark is flaky and gives burn protection to the trunk. Long intervals between fires cause greater ferocity through a build-up of ground litter. However, finally, Jack pine seeds actually prefer such barren soils and flourish in sunlight and open space. BH

The 4th edition of Pliocene Forest Plant Profiles 2019 is available – Barry Hall tells us more about the trees in this 60-page booklet. To order your copy send a cheque for £6 payable to GeoSuffolk c/o Ipswich Museum High Street Ipswich IP1 3QH



Stop Press: GeoSuffolk has just heard that the Sutton Open Gardens event this year will be on June 7th - we shall apply for the Pliocene Forest to take part.

Walls Survey

GeoSuffolk has carried out several wall surveys in the past, e.g. Roger Dixon's 2007 leaflet *GeoSuffolk goes to Church in Coastal Suffolk*. More recently Ian and Ros Mercer of the Essex Rock and Mineral Society have inaugurated an Essex wall survey, with cobbles giving clues to underlying geology. They welcome records of Suffolk walls to extend this project and GeoSuffolk fully supports this. At its simplest a record could be 'flint' and 'other' and one soon learns more – records are of course repeatable. For information go to <http://www.erms.org/walls-survey1.html>. Suffolk specialities such as Coralline Crag can be added to the survey list. RM

Berridges

This independent jewellery shop in Dial Lane, Ipswich celebrated its 25th Anniversary in 2019. It is always worth a geological look in their windows. On New Year's Eve we particularly enjoyed three 18 carat aquamarine rings; a Victorian old cut 2.11 carat diamond ring; an opal solitaire with 18 carat gold; and a Victorian peridot and pearl necklace. (And they have a restaurant!) CM & RM

Cornwall comes to Essex (and Suffolk)

This year's Essex Gem and Mineral Show*, run by the ERMS, is on February 22nd at North Romford Community Centre, RM5 3QJ – from 10am to 4pm, admission £2. The show is always worth a visit and don't miss the ERMS *Cornwall Comes to Essex* stand with black and white rocks which include tourmaline and quartz, brought to Essex (there will be a few from Suffolk) from south west England by ancient rivers.

*<http://www.erms.org/erms-show.html>

RM

Barnham: Home is where the hearth is

Thank you to Barry Hall for bringing our attention to an article of this name in *British Archaeology* Jan/Feb 2020. This is a useful summary of work on this Hoxnian site by Nick Ashton, Rob Davis, Simon Lewis and Simon Parfitt, with excellent photographs. CM

Millicent Garrett Fawcett

A bronze statue of the Aldeburgh-born President of the National Union of Women's Suffrage Societies 1897-1914 was unveiled in Parliament Square in London in 2018. The plinth, constructed by Fyfe Glenrock at their Oldmeldrum works near Aberdeen, comprises 2.5 tonnes of Peterhead Granite. RM