

GEOSUFFOLK TIMES

Bawdsey Cliff SSSI July 2018

Welcome to issue no.40 of GeoSuffolk Times.

Caroline Markham 19.04.19 www.geosuffolk.co.uk

Magnetics

On Tuesday March 18th 1980, on a flight from Heathrow to San Francisco, I passed over King Dywie, at the south-west corner of Baffin Island and quite near to the Magnetic North Pole (so the pilot told us). But that pole moves – generated by ‘liquid’ iron in the outer core. In 1980 it was moving north-north-westwards and by 2001 it had entered the Arctic Ocean west of Ellesmere Island. By 2018 it was passing about 250 miles south of the Geographic North Pole, crossing the International Date Line and into the Eastern Hemisphere. Currently it is falling away from true north and heading towards Siberia.

GPS notwithstanding, the earth’s magnetic field is still used for navigation and orientation. At Stansted Airport in 2009 the shifting magnetic field meant that the runway title (based on its location and compass reading) known by pilots and air-traffic controllers, was changed from 23/05 to 22/04.

Bob Markham (RM)

Meet GeoSuffolk

Tuesday May 7th ‘Puddingstones and Sarsens’: looking at big stones in the south courtyard at Ipswich Museum, 10am-1pm (a ‘GeoWeek’ event).

Wednesday May 29th ‘Ask the Expert’ day at Ipswich Museum - bring along your geo-finds to discuss with us, 10.30am – 3.30pm.

<https://ipswich.cimuseums.org.uk/events/asktheexpertmay/>

Friday May 31st ‘Wild in the Stour Valley’ – GeoSuffolk will have a stand at this event in Sudbury.

<https://www.riverstourfestival.com/event/wild-in-the-stour-family-event/>

Sunday June 16th ‘Coprolipe Street’ stand by GeoSuffolk at the ‘Tractors and Mowers’ day at Ipswich Transport Museum. <https://www.ipswichtransportmuseum.co.uk/whe-nweroopen.html>

White Admiral Online

Issues 97-101 of the Suffolk Naturalists’ Society Newsletter are online now at <https://goo.gl/P6XGsn>
Geological content includes:

- *Fissures in the Coralline Crag at Rockhall Wood SSSI Sutton* by C Markham, WA 97, Summer 2017. Investigation of the system of near-vertical cracks in this outlier of the Coralline Crag finds them to be aligned along the orthogonal ENE-WSW and SSE-NNW, conforming with the documented pattern in the main outcrop further north.
- *Harwich Harbour Stone Beds* by R Markham, WA 99, Spring 2018. A record of Eocene sandstone boulders dredged in 1994 and dumped at Landguard, Felixstowe. They were fossiliferous - in March 2019 GeoSuffolk helped Ipswich Museum to sort leaf specimens for identification at London’s Natural History Museum.



- *Megalodons at Bawdsey* by R Markham, WA 101, Winter 2018/9. This records a very fine fossil shark tooth which resides with its collector – worth looking at for the photo.
- *Some Comments on the Crag at Sizewell* by H Mottram, WA 101, Winter 2018/9. This uses lithological evidence to suggest that the Thorpeness Member of the Red Crag in boreholes at Sizewell be reassigned to the Norwich Crag. CM

Clearing the Red Crag at Alderton

GeoSuffolk, with the help of Suffolk Coast and Heaths AONB volunteers has, over the last few years, been giving many of the crag pits on the heathland a much needed facelift. Many of these have public access and so are valuable assets both for leisure and education. Some, like the one most recently cleared at Alderton are on private land, but need to be kept clear for scientific investigation. All provide those glimpses of our past viewed by chance from footpaths, maybe through vegetation or across sloping ground, which are a familiar part of the Sandlings landscape.



There was a good turnout at Alderton on February 5th and we cleared two sections of the Red Crag. The one in the photo (viewed here from the Alderton to Ramsholt footpath) showed excellent current bedding. A big thank you to the landowner and the AONB volunteers. CM

Geo-Anglia

- In the East Anglian Daily Times 09.02.19 Martin Newell wrote of the relics of the sand and gravel industry in Essex's Colne Valley - lakes near Alresford marking former pits; copses in old former pits; a rusting conveyor by the old sand jetty at Alresford Creek; a rusting iron gantry (which once conveyed buckets loaded with gravel to the old ballast quay) in a spinney near Wivenhoe. Wivenhoe itself has Ballast Quay Lane, Ballast Quay Farm and Ballast Quay House.
- The Eastern Daily Press 12.11.18 featured Pigneys Wood near North Walsham, Norfolk – a Norfolk Wildlife Trust Nature Reserve. Many years earlier it was said (not in this article) that an Ice Age grove was planted here to illustrate colonisation of Britain by trees at the start of an interglacial. Did this exist and if so what happened to it? RM

John Eaton

John Eaton (1935-2019) was a geography teacher at Northgate School, Ipswich. His article 'Coastal Studies at Orford Haven' in Ipswich Geological Group Bulletin no.18, September 1976 (see our website archive), based on surveys by his students, was originally presented at the 1967 meeting of the Geographical Association at Felixstowe. RM

Snippets

- The Suffolk Minerals and Waste Local Plan, Habitats Regulation Assessment, November 2018 features a 2016 start of quarry extension at Cavenham for 10ha. It would take 6 years to extract and 4 years for restoration. Extraction is in phases to reduce temporary loss of 'high quality nesting habitat' land for stone curlews.
- John Stevens Henslow and the origin of Fisons feature in an article by John Norman of the Ipswich Society in the Ipswich Star 06.03.19.
- Microplastic particles found in Deben Estuary saltmarsh sediments by AONB placement student Will Eden feature on p13 in the Suffolk Coast and Heaths Spring/Summer 2019 Newspaper. <http://www.suffolkcoastandheaths.org/publications/aonb-newspaper/>
- A 'climate change protest' by students and other activists in Ipswich town centre on 11.04.19 included a placard with a 'dinosaur' and slogan 'Don't be a fossil fool'. As they say – 'Comments on a post card please' (but not to me)!
- The Suffolk Walking Festival this year features on May 19th a walk by the Suffolk Wildlife Trust at Newbourne Springs which promises – 'There's a chance you might find fossils'. <http://www.suffolkwalkingfestival.co.uk/> RM

IYPT

2019 has been designated by UNESCO as the 'International Year of the Periodic Table (IYPT 2019)'. Michael Faraday (1791-1867), known for electromagnetism studies and (as a chemist) Fullerton Professor of Chemistry at the Royal Institution, attended the British Association Annual Meeting at Ipswich in 1851. The Suffolk Chronicle 18 January 1851 records him presenting 'Preparations of Iodine, Bromine, Phosphorus and Chlorine', non-metallic elements, to the (then private) Ipswich Museum. He was also elected an Honorary Member of Ipswich Museum that year. Faraday Road in Ipswich is named for him. RM