

GEOSUFFOLK TIMES

Newsletter 56

January 2023

<https://geosuffolk.co.uk> Caroline Markham 29.01.23

Orfordness from Flybury Point June 2022

Crag Thor

Thor the walrus has been visiting English and continental beaches in recent weeks. Walrus tusks have long been members of the Suffolk fauna. In 1865 E. Ray Lankester figured (Quarterly Journal of the Geological Society of London) three portions of large tusks of walrus from the Red Crag of Sutton and Felixstowe, in the collection of William Wincop of Woodbridge. They showed the characteristic core of globular osteodentine (secondary calcification around vascular canals), a tissue developed in living walrus and to a lesser extent in other mammals.

Walrus tusks are elongated upper canine teeth, used by living animals to obtain and feed on sea-floor dwelling bivalve molluscs (I wonder what Thor was eating in the North Sea?). In 1882 Ray Lankester, by then Professor of Zoology and Comparative Anatomy in University College London, figured (Transactions of the Linnaean Society) two nearly complete tusks in Ipswich Museum, which had formed part of the Rev. Henry Canham (of Ramsholt) collection. Fossil walrus remains have also been found in the Norwich Crag, including a lower jaw from Easton Bavents, found in 1993 by Ian and Alister Cruikshanks, and donated to Norwich Castle Museum. It was illustrated in Deposits Magazine no.2, March 2005 (<https://depositsmag.com>)

Bob Markham (RM)

Surveying SSSIs

GeoSuffolk has assessed three more SSSIs for Natural England this winter. Holton Pit near Halesworth, designated for its Pleistocene deposits (Lowestoft Till, outwash gravels and Norwich Crag Gravels), is not in good condition at present. Similarly, Aldeburgh Brick Pit designated for its crag stratigraphy (Kesgrave Sand and Gravel, Chillesford Clay, Chillesford Crag and Scrobicularia Crag overlying Coralline Crag) has a plethora of brambles covering it. However, the Red Crag of Neutral Farm Pit, Butley is still well-exposed eight years on from the two GeoSuffolk/Suffolk Coast and Heaths AONB Work Parties there in 2016.

These SCH AONB events are proving to be an effective management tool for our pits. Our November 2022 Work Party did some work on Alderton House pit. The next one is on Tuesday March 21st – anyone can join in, you need to register with SCH AONB. CM

[Practical Conservation Tasks – Coast & Heaths Area of Outstanding Natural Beauty \(suffolkcoastandheaths.org\)](https://www.suffolkcoastandheaths.org/)

Keeping Track

The hot dry summer of 2022 led to soil moisture deficit problems on railways - ground moves and shrinks and can cause ballast and track to move. The November 2022 Ipswich Transport Journal reported that movement of London Clay underlying the track between Wickford and Southminster gave Essex passengers a rough ride, and shrinkage of peat between Cambridge and King's Lynn also caused problems. Speed restrictions were applied in both cases. Many will remember the 'Marks Tey lurch' (particularly bad about 10 years ago) due to London Clay under the track. RM

Love Nature at Christchurch Mansion Ipswich

Tuesday February 14th 10am – 3pm

Meet GeoSuffolk at this free Ipswich Museum event. We will be celebrating life through time with fossils for you to see (and some to hold), including the Stegodon tooth from Java shown opposite.



Do bring your specimens for us to see. [Love Nature | Ipswich Museums \(cimuseums.org.uk\)](https://www.cimuseums.org.uk)



Coralline Crag at Thorpeness



Photographed in January 2023, this cairn mainly made of Coralline Crag 'Rock-Bed' blocks is close to the board walk from the car park to the beach in Thorpeness. Blocks such as these can be found along the beach here – they have been eroded from the submarine outcrop of Coralline Crag just to the north. GeoSuffolk is writing a leaflet about the 'Rock-Bed' – keep a look out for it this summer. CM

Household Coal

The Department for Environment, Food and Rural Affairs has announced that the sale of bituminous coal (traditional household coal) will be banned in England from May 1st 2023. Anthracite coal, semi-anthracite coal and low volatile steam coal can continue to be sold. Traditional house coal extracted and sold from the Forest of Dean is exempt and can continue to be sold locally. Bituminous coal is a fascinating rock so obtain a specimen while you can.

In 1918 the Royal Society published a paper on the four visible ingredients of bituminous coal, by Marie Stopes (1880-1958), palaeobotanist of University College London. Marie Stopes' interest in fossils was fostered when, as a girl, her father took her on field trips to crag pits in Essex and Suffolk. So what are the 'Stopes four' in household coal? Look at the bright and dull bands of your piece of it - if you have managed to obtain one! The powdery charcoal-like material is called *Fusain* (it causes much of the coal dust); *Durain* is dull and hard; *Clarain* is bright and smooth 'glance coal'; *Vitrain* has conchoidal fracture and is brilliant in appearance. Marie Stopes was of course also a women's rights campaigner. RM

Suffolk Naturalists Society Transactions

The SNS Transactions for 2021 is online now. It has Bill George's '*Geological Field Guide to Stutton*' – an excellent companion to a visit to this geological SSSI. Also, Howard Mottram's '*The implications of wear and tear on flint pebbles in some local Pleistocene deposits*' discusses the relative roundness/angularity of flints in the Norwich Crag Gravels compared to those in later Pleistocene deposits. [Suffolk Natural History | Suffolk Biodiversity Information Service \(suffolkbis.org.uk\)](https://suffolknaturalistsociety.org.uk/)

Geological Events

Details of two events with direct GeoSuffolk involvement are given on page one – Love Nature at Christchurch Mansion on February 14th and the SCH AONB Work Party on March 21st. Here are three more events which may interest you:

- *A Portal into another world: snorkelling the chalk streams of the Brecks and Fens* by Nicola Crockford. At the Guildhall in Thetford on February 2nd 7pm. This is part of the Winter Talks Programme of the Brecks Fen Edge and Rivers Landscape Partnership. <https://brecks.org/events/>
- Essex Gem and Mineral Show, Saturday February 18th 10-4 at North Romford Community Centre – minerals, fossils, Gemstones and refreshments, £2 entry. Organised by the Essex Rock and Mineral Society, see [Shows & Events - Essex Rock & Mineral Society \(erms.org\)](https://essexrockandmineralsociety.org.uk/)
- The Ipswich Society, March 15th, 7.30 - *Suffolk Building Stone and the people who worked on it* by Tony Redman (joint author with RM of GeoSuffolk's 2022 Bury St Edmunds leaflet *God's Square Rocks*). At Museum Street Methodist Church in Ipswich, this is free and open to all. [Forthcoming Events 2023 » The Ipswich Society](https://www.ipswichsociety.org.uk/)

Orford Castle

Below is a photo taken on the scaffolding during GeoSuffolk's visit to Orford Castle with English Heritage guides last October (see GeoSuffolk Times 55). The Medieval Caen Stone can be seen with modern replacements in place where needed, also the new lime mortar covering the badly weathered Medieval septaria blocks. CM

