

www.geosuffolk.co.uk Caroline Markham 18.04.22

Heritage Steam

British steam locomotives are designed to use lumps (50 – 125 mm) of steam coal, a grade of bituminous coal, and with the closure of Ffos-y-fran mine near Merthyr Tydfil and rejection of an open cast mine at Dewley Hill near Newcastle, future supplies will be imported (a proposed mine off Cumbria would be in coking coal). The North Norfolk Railway obtained stocks of coal from Poland in the 1990s and the Bure Valley Railway has used 50/50 lumps of olive husk and solid fuel fines. At the time of writing coal from Russia is banned and that from Kazakhstan normally comes via Mariupol (Ukraine), and thus the heritage steam sector is investigating supplies from Columbia and from Australia. Bob Markham (RM)

AONB Work Parties

Thank you to all Suffolk Coast and Heaths AONB Work Party volunteers – sites are starting to show lasting effects as at Orford Castle Pit CGS (see GeoSuffolk Times no 52) and Sudbourne Park SSSI, which we assessed to be in GOOD condition for Natural England last December. On March 8th this year parts of Gedgrave Hall SSSI were cleared of vegetation and talus by GeoSuffolk and the AONB Work Party. This SSSI, on private land, has been designated for its Coralline Crag exposures. A section of the lower pit was dug free from some of its talus, exposing fossiliferous sandy material. The upper pit was cleared of brambles to reveal an exposure of the harder 'Rock Bed' (photo below). CM



Museum Events Return!

The first 'Ask the Expert' for two years, held at Ipswich Museum on February 23rd, saw people queueing at the GeoSuffolk stand with bags of specimens, from the fields and beaches of Suffolk, to be identified. It was a fantastic day, to be followed by two Ice Age days – one at Ipswich Museum and the second at Colchester Natural History Museum on April 12th and 13th. Once again, GeoSuffolk's stand was popular, with the sabre-toothed cat skull a real favourite - see below. GeoSuffolk members photo enjoyed themselves every bit as much as the visitors to the Museums. CM



Ichthyosaur Fossils in Suffolk

GeoSuffolk's ichthyosaur vertebra was another favourite at the Ice Age days – a reminder of the large ichthyosaur skeleton found in Rutland's Jurassic clay earlier this year. It has several relatives in Suffolk, but only in the form of isolated bones and teeth brought here by Pleistocene ice sheets. I checked out my list (made many years ago) of ichthyosaur vertebrae erratics in the Ipswich Museum collection. There are specimens from boulder clay (till) at Bramford (Blood Hill), Great Blakenham (clay quarry), Grundisburgh, Parham and Weybread; from gravel at Barking, Creeting and Woodbridge; and surface finds at Claydon, Cookley, Corton, Dallinghoo, Debenham (this one is illustrated in GeoSuffolk's 'Erratics' leaflet), Monks Soham, Pettaugh and Stowupland. RM

Surveying SSSIs

In February GeoSuffolk surveyed two further SSSIs for Natural England, both designated for their Coralline Crag exposures. Round Hill Pit SSSI is a delightful locality – a privately owned site at the western edge of the outcrop, on the shore of the Alde estuary. It shows an unusual lithology with thin mudstone bands and quantities of trace fossils.

To do justice to the citation for Rockhall Wood SSSI, which includes '*In the study of Pliocene geology this is probably the most important site in Britain*', we took 50+ photographs. Fortunately, we are familiar with this privately owned site as GeoSuffolk has done much management here in the past. It is still in very good condition, showing the Coralline Crag stratigraphy right up to its unconformity with the Red Crag. The photo shows the north face with two walkers on the public footpath which runs past it.



The latest Suffolk Biodiversity Information Service newsletter has more on 'Surveying our Geological SSSIs' - <u>Spring 2022 (suffolkbis.org.uk)</u> CM

Pliocene Flora

It was good to visit Rockhall Wood SSSI in March after two years' absence. We noted that the Pliocene Forest is in good condition and can be viewed from the footpath (as in photo above). There will be more forest news in the July GeoSuffolk Times. Meanwhile why not plant a few of the smaller species from the Pliocene pollen record in your garden? Suggestions from Barry Halls' list include *Digitalis, Verbena officinalis, Thalictrum flavum, Aquilegia vulgaris, Pulsatilla, Ranunculus,* plus almost anything from the *Umbelliferae* and *Labiatae* families. Oh, and Barry says that a patch of nettles is a must! CM

Westleton Common CGS

Please note that the small exposure of Westleton Gravel by the car park on the Common is on private property (but is still easy to view). The large publicly accessible pit on the Common is the County Geodiversity Site.



Dunkirk Veterans Memorial

Tony Redmond informs us that the fossiliferous Carboniferous Limestone of the Dunkirk Veterans Memorial in the Abbey Gardens, Bury St Edmunds, is possibly Lunel Limestone from Southern France and is commonly used for memorial work in the Caen area.

Pakefield

The Lowestoft Journal 21 February 2022 had a photograph of a cliff section revealed by coastal erosion at Pakefield that month. It showed what appeared to be yellow sand above white sand with a ferruginous horizon at the junction. This compared closely with the 1884 section of J H Blake of the Geological Survey: buff-coloured sand ('Middle Glacial')* above white and brown sand, pebbly in places (Pebbly Series) with a 'very marked ferruginous line' at the junction. RM

*'Corton Sands' of later authors.

Richard G Bromley

In a recent (2020) Proceedings of the Geologists' Association, Andy Gale writes of Richard Bromley (1939-2018), lecturer at the University of Copenhagen and author of the textbook 'Trace Fossils' (1990, 1996). More recently Richard was joint author, in Palaeontology 1999, about trace pits made by bryozoans from the Coralline Crag at Ramsholt and the Broom Pit, Orford. We are introduced to the new ichnogenus *Leptichus*, updated to *Finichus* in 2013.

I knew Richard well when we were at Queen Mary College, University of London. He was already studying fossil sponge borings and he used some of my Red Crag oysters to make radiographs to demonstrate at a meeting of the

Palaeontological Association in about 1964. Shown here is one (of a stereopair) from Newbourne, 'still unknown to science' Richard told me in 1999. (The oyster shell is still possibly somewhere in Denmark.) RM



Saharan Dust

Our windows (in central Ipswich) were a pleasure to clean said our window cleaner on March 17th. They had received very little Saharan red dust compared to the mud deposited on windows in the west of the town. The day before wonderful pink skies resulted from this dust in the atmosphere. See Suffolk Naturalists' Society White Admiral no 43 for a report of the 1999 dust event.