

Welcome to issue no.45 'extra' of GeoSuffolk Times – a small diversion during lockdown. Caroline Markham 18.05.20 www.geosuffolk.co.uk

Our Neighbours' Geology

In the last few years we have moved our home from Woodbridge (on 'chalky boulder clay') to Ipswich (on 'Valley Gravel' – see 'A Moving Experience' in GeoSuffolk Times no.21) and now, still in Ipswich, on decalcified Red Crag – a spring is only metres away, as was the find of a Megalodon tooth a few years ago.

Many of our neighbours here are from Romania, which led me to find out about their home geologie (Romanian spelling). The Carpathian-Balkan mountain chain forms a reversed 'S', and contains 'Precambrian' and Mesozoic rocks, and also Neogene volcanics. Oh, and they do have dinosaurs, see Deposits magazine no.58 (2019) (see www.ukge.com). But of more local interest, Romania lay on the migration route from Africa into Europe and the earliest European Mammuthus mammoth, rumanus (Romanian mammoth), is known from the Red Crag of Suffolk, with a tooth from Falkenham on display in Ipswich Museum. Bob Markham (RM)

Golden Spike?

Anthropocene Golden Spike*. A number of suggestions have been put forward for the commencement of Anthropocene time with its significant human impact on Earth's geology and ecosystems. What could be better than the year 2020? The Covid-19 pandemic is a global event with significant effects on biosystems, pollution, materials extraction and much more - easily measurable. Let us not lose the opportunity!

*For those who, like me, are not sure about RM's reference to a 'golden spike'. This is a gold-coloured 'piton' hammered into a cliff face at an agreed Global Boundary Stratotype.

Geo-Anglia

Congratulations to Ros and Ian Mercer of the Essex Rock and Mineral Society who have been awarded the Geologists' Association Halstead Medal for 2020, for 'work of outstanding merit..........to promote geology'. 'Church Materials — a Deep History in Walls' by Ian Mercer (published by Broomfield church PCC, Chelmsford, 2019) has excellent illustrations of rocks, in some cases, e.g. the breccia figure 30 is enlarged (inside back cover) as one might look at it with a magnifier/lens.

Ipswich Brickyards

Following a meeting in that parish, Neil Mahler sent me an image of a brick imprinted with 'Wherstead' from the Ipswich Historic Lettering website http://www.ipswich-

lettering.co.uk/whersteadred.html



See also 'Ipswich Brickyards recorded in the Geological Survey memoirs of 1885 and 1927' in Ipswich Geology Group bulletin no.19 (1977) at https://geosuffolk.co.uk/index.php/archive/ipswich-geological-group RM

Suffolk Natural History 2018

Howard Mottram's article 'Can modern day molluscs help us to model decalcified Red Crag back to Shelly Red Crag?' in edition 54 of the Suffolk Naturalists' Society Transactions is available to download now at http://www.suffolkbis.org.uk/node/909

Pliocene Forest Outreach

GeoSuffolk's Pliocene Forest at Rockhall Wood SSSI, planted using data from the Pliocene fossil pollen record, is ten years old this year. It is on private land and although it is viewable (with interpretation panel) from a public footpath, we wanted to make these Pliocene survivors more accessible. A few years ago, three specimens were planted in Christchurch Park in Ipswich. Much of the park is on Pliocene deposits, but the lucky trees, close to the springs north of the Wilderness Pond, have their roots in the Eocene and so are never short of water. They are Pinus Metaseguoia glyptostroboides ayacahuite, Fitzroya cupressoides (as in the photo, taken last week in the park). CM



Though Fitzroya is a single species tree it is unquestionably a great one. Now assigned to the Cupressaceae family it is found along the coast and foothills of the Andes of southern Chile and Argentina although fossil evidence shows a wider Paleogene -Neogene province including Tasmania. Darwin recorded his meeting with this remarkable cypress in his voyage diary, but they were not botanically described until 1851. It is an evergreen conifer to a height of 50 to 60 metres, slow growing but, given time (lots of it), eventually massive. Living specimens have been dated in excess of 3600 years of age with some larger, hollow-trunked specimens, potentially much older. It is now a protected species although illicit logging continues. It occurs in 'alercales' or groves which probably represents opportunistic seeding following areas cleared of Southern beech by fire, storms, earthquakes, landslides and volcanic activity. The timber was extensively used for building purposes, in particular roofing shingles, as it is almost imperishable. Barry Hall



Derek Barbanell

After attending school in Saffron Walden, Essex, Derek graduated at King's College in London, in the early 1950s, with a Geography degree with subsidiary Geology. He then taught at a boys' high school in Southern Rhodesia (now Zimbabwe), introducing geography and geology onto the syllabus. He later started an Outward Bound school in the eastern highlands. On his return to England he became an adult education centre warden, first at Burwell House near Cambridge, then at Belstead House in Ipswich. After retirement he represented his East Suffolk branch of the U3A at GeoSuffolk meetings. To be close to his family he moved to Lancashire in 2016, where he died on 28th February 2020, aged 92. Among the geological specimens he brought back from Zimbabwe were Corundum from near Raffingora and Banded Ironstone from Hunyani. RM

Rock-spotting from Home

Need a vast rocky object to look at during lockdown? Try the Moon! Basic lunar geology may be seen with the unaided eye or, even better, with binoculars. The surface shows large dark-coloured areas outlined by brighter, light-coloured areas. The bright areas are mountainous highlands and the Moon's earliest crust. They are mainly composed of anorthosite, a rock containing the white mineral anorthite. The darker areas are hollow basins ('maria' or 'seas') flooded by basalt lavas 3.8 to 3.1 billion years ago. The surface, especially the bright areas, is covered with countless craters (typically 10-100 km across) mainly formed by meteorite impact. Geologically young craters, e.g. Tycho, show bright ejecta rays. See more at different phases – at full moon it's intensely bright and there are no shadows to bring out relief.

<u>Derek Searle Collection</u>

In 1994 I visited geologist Dr Derek Searle at his Ipswich home. His publications include Geological Survey of Kenya reports on the Kitale area (1952) and the Sultan Hamud area (1954) and, for the XXII International Geological Congress in New Delhi, India, (1964) 'The Metamorphic History of Ceylon' and (with Ba Than Haq) 'The Mogok Belt of Burma'. He presented specimens to enhance the Ipswich Museum collection, including Szomolonkite, Voltaite and Coquimbite from the Skouriotissa mine, Cyprus, and Phlogopite (Ruby Mica) from Davy's claim, Taita Hills, Kenya.