GeoSuffolk Times

Newsletter No.16 April 2013

Keep in touch with GeoSuffolk Times. Welcome to issue number 16 of our newsletter - for those who value Suffolk's geodiversity. Caroline Markham 27.04.13 www.geosuffolk.co.uk

Meulières

Alton Water Mill at the Museum of East Anglian Life, Stowmarket; Flatford Mill; Bourne Mill, Colchester, and others – great places to visit this summer, but don't forget the millstones!

I particularly like French 'burrstone' where pieces have been cut to fit together by metal clamps to form a millstone. This is a very tough siliceous limestone from the Oligocene-age Calcaire de Brie at La Ferté-sous-Jouarre, east of Paris. It makes a very good meulière (millstone) because small cavities in the rock give a natural shearing action and as the stone wears down new pockets are exposed. It was thus virtually self-sharpening, whereas other stones often needed to be roughened up at regular intervals. Grinding by millstones involved passage through several feet of rough handling, with powdered husk getting into flour and bread. Modern roller mills nip the grain at one point only, giving a relatively gentle grinding action. Bob Markham(RM)

Have you read?....The Pliocene Deli - a culinary trawl through the Red Crag by Roger Dixon.

If you have ever wondered what a trilobite tastes like or how to cook an ammonite, this is the article for you. Closer to us in time, the Pliocene offers more familiar fare if no less exotic and Dr Dixon guides us through its fossil record with a mouth-watering array of recipes and cooking tips. From razor shells ("lovely!"), crabs and sea urchins ("salty, tangy") to wild pig, venison and ox ("needs long slow cooking"!) and, finally a list of plants which would do justice to a medieval herbal, we learn almost by default the scope and variety of the fauna and flora 2.5 million years ago. To read the gastronomic delights and geological truths in this article for yourself, buy a copy of *A Celebration of Suffolk Geology*, published by GeoSuffolk and edited by Roger Dixon. Almost as much fun - try some of the recipes. Oven-roasted buffalo meatballs in a horseradish sauce; crab vol au vent in a creamy Madras sauce; Moules marinière using *Glycymeris, Buccinum, Mytilus, Donax, Tapes* – are just some of the delights on offer! CM

Coralline Crag at Thorpe Ness

Suffolk's coastline is characterised by its 'nesses' – large triangular sand/shingle beaches extending out from the coast and these move northwards over an extended period of time, Kessingland Ness being particularly well documented. Thus, in 2012 when GeoSuffolk designated Thorpe Ness a County Geodiversity Site we checked its location - and discovered no discernable change from its location on the 1998 OS map.

Thorpe Ness lies at the north-east end of the Coralline Crag outcrop which extends under the sea at this point. Abraded pieces of crag from the submarine outcrop can be found on the beach here.

Could it be that its position astride this relatively hard rock formation has stabilised the ness, restricting its movement northwards? For more information see *Where is Thorpe Ness?* by Caroline Markham in *White Admiral 84* at http://www.sns.org.uk/pages/wad.shtml

The Coralline Crag ridge under Thorpe Ness is recognised as crucial in protecting the Sizewell coast -see pp 77-79 of the Environmental Report for Sizewell C (November 2012). http://sizewell.edfenergyconsultation.info/wp-content/uploads/SzC-Stage-1-Environmental-Report.pdf CM

Highly Commended

GeoSuffolk was highly commended for its outstanding work in the category of Landscape and Biodiversity at the Suffolk Creating the Greenest County Awards 2013 held on March 28th at the Apex, Bury St Edmunds. RM

www.geosuffolk.co.uk has a list of contents and how to buy
A Celebration of Suffolk Geology

News: Geodiversity Providers and Owners

Condition Monitoring Suffolk CGS

All 19 public County Geodiversity Sites monitored by GeoSuffolk to date have achieved 'good' or 'green light' status. The joint Natural England, GeoConservationUK, Geology Trust guidelines however, have four categories of 'good'! Four CGS visited in Autumn/Winter 2012/13, illustrate the way GeoSuffolk uses these categories.

GOOD DECLINING. The sarsen stones at the Stoke Bridge Pocket Park in Ipswich are particularly fine. They were dredged from the bed of the River Gipping in the 1970s. Recently the graffiti has increased to the extent that the two largest stones have permanently lost some of their geodiversity interest. GeoSuffolk considers the surface details of these two sarsens to be beyond rescue and so the site achieved *good declining* status. *Good*, because there are many other stones with good surfaces and the impressive size of the two largest is still evident, and the *declining* epithet has been used because management to restore the detail of these two is desirable but not possible.

GOOD STEADY. The Coralline Crag pit on the Orford Castle site is part of the English Heritage Scheduled Ancient Monument and may have supplied the Coralline Crag building stone used in the interior of the Castle. A 2-3m exposure of Coralline Crag can be seen. Talus has built up at the base over the last few decades, but could easily be removed. It was assessed as *good steady* – management is required to restore it and is possible.

GOOD IMPROVING. The well at the Long Shop Museum in Leiston with the borehole at its base extends down more than 400 feet through the Crag, London Clay and Lower London Tertiaries into the Chalk, which is our basement bed in Suffolk The well has undergone remedial work recently, making it sound for some time to come and GeoSuffolk gave it *good improving* status – management has been undertaken to maintain in good condition.

GOOD. Christchurch Park CGS was designated for its rockery of sarsen stones and for the springs (supplying landscaped ponds) at the junction between sand/gravel/Red Crag and the impermeable London Clay. GeoSuffolk allocated *good* status to all of these features – they are in excellent condition and well managed.

Thank you to the landowners for maintaining these public access sites so well.

A more detailed version of this article has been sent to the Suffolk Biodiversity Partnership Newsletter. For more information see www.suffolkbiodiversity.org/default.aspx CM

The 'Pliocene Forest'

The 100+ trees in GeoSuffolk's 'Pliocene Forest' at Rockhall Wood SSSI, Sutton, have survived the winter well. The deer fence has done its job (a visit in the snow in February showed many deer footprints around the outside – rather like the *Day of the Triffids!)* and only two plants show some frost damage. Barry Hall, GeoSuffolk's 'Pliocene pioneer', sources the trees using Professor Richard West's pollen genera records from the Coralline Crag and this spring they have some new companions. Amongst them, *Pinus halepensis* (Aleppo Pine) also grew in Cézanne's garden in Aix-en-Provence and is featured in his painting *The Big Trees*; and *Pinus taeda* (Loblolly Pine) is famous for being Eisenhower's *bête noir* at the 17th hole of the Augusta National Golf Club. If you wish to sponsor one of these new trees, email info@geosuffolk.co.uk CM

Information Before Action

This was the clear message to GeoSuffolk in consultations on a Draft Geodiversity Action Plan (GAP). Hence in 2010 GeoSuffolk introduced its Geodiversity Action Pack (GAP!). The 60 page *Earth Heritage Suffolk,* written by Bob and Caroline Markham, is a handbook full of information for Suffolk geodiversity owners and providers. Their actions are reported in our quarterly newsletter *GeoSuffolk Times.*

Nationally, the UK Geodiversity Action Plan (2011) at www.ukgap.org.uk/ has support from the Scottish Geodiversity Charter (2012), an excellent document with useful case studies - see http://scottishgeodiversityforum.org/charter/

In February 2013 work started on a long overdue English Geodiversity Charter along the same lines. RM, CM

Snippets

- One of CM's photographs on show at the Festival of Geology in London last November was the sand table in Dennington Church, used from c 1830 – 1860 to teach Dennington children to write. There is a photograph of the sand table with Bob Reeve, the last man to learn to write on it, in the East Anglian Magazine of 1958.
- GeoSuffolk took two of its geology scrapbooks to the Suffolk Local History Council's Societies' Day at Elmswell on 16.03.13. The Mid Suffolk book features Barham and Claydon; the Babergh book Shotley and Sudbury.
- 2013 is the centenary of the birth of composer Benjamin Britten. He lived at *Crag House*, by Moat Green, Aldeburgh from 1947-1957 - there is a plaque on the house. RM