

# INSPIRATION

A cornucopia of ideas.

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The Abbey Gardens Bury St Edmunds

## LOCAL HEROES

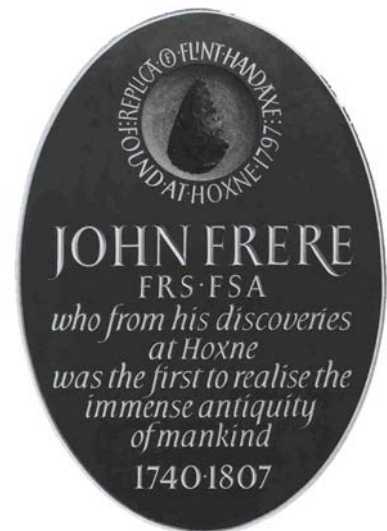
Lives of great men all remind us  
We can make our lives sublime,  
And, departing, leave behind us  
Footprints on the sands of time....



As Longfellow suggests, those who have left their mark on Suffolk geology can inspire us all. Here are just a few:

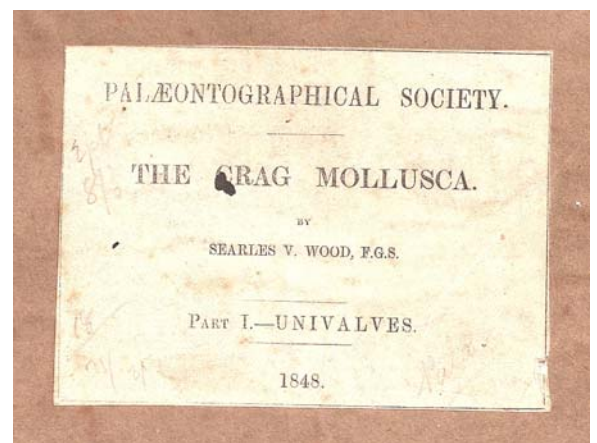
**John Frere** – the first person to realise (at Hoxne) the immense antiquity of humanity, reported in a letter to the Society of Antiquaries of London on 22 June 1797. His memorial is in the chancel of Finningham Church.

**Professor John Stevens Henslow** who discovered phosphate nodules (coprolite) in the cliff at Felixstowe in 1843 and thus began the local artificial fertiliser industry.



**Searles Valentine Wood** who recorded the earliest ancestors of the modern British fauna. There is a memorial to him in Melton Old Church (now in the care of the Melton Old Church Society).

In memory of  
Searles Valentine Wood  
Author of a Work on the  
Mollusca of the Crag  
and Son of  
John Wood  
named in the adjoining tablet,  
who died 26th Oct 1880, aged 82 years  
and of Elizabeth, his Wife  
who died 19<sup>th</sup> Oct 1860,  
both buried in this Cemetery.  
This tablet is placed here  
by their only Child.



**The early humans** who left their flint implements at Pakefield nearly 700,000 years ago, the earliest in Britain.

## ART AND MUSIC

Geology, directly or indirectly, is the source of much artistic inspiration.

Bernard Reynolds, local sculptor, arranged some of the sarsens in Bridge Pocket Park in Ipswich, as a work of art – local stones, at the locality they were found, local artist – what could be better? They have been subjected to unwanted graffiti and mechanical distressing at various times.

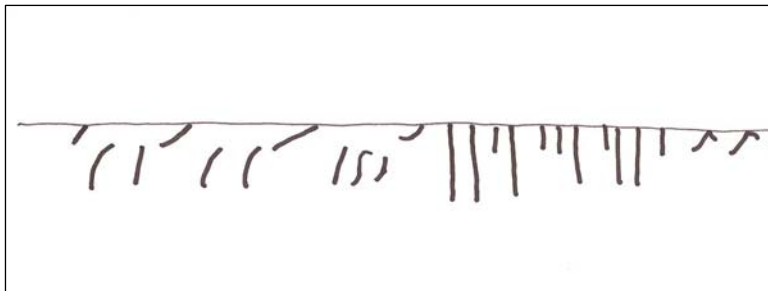
Sculptor Henry Moore has several works of art in Suffolk – he especially used Hopton Wood Stone from Derbyshire.



Geological exposures feature in a number of paintings by local artists. A fine example is of Great Blakenham Chalk pit, by Leonard Squirrel, in Christchurch Mansion, Ipswich.

There is a stained glass window in Waldringfield Church which was paid for by proceeds from the coprolite industry.

There was a 'first' (probably) on the GeoSuffolk stand at the 2009 Festival of Geology (Geologists' Association) in London – the song of a Pliocene Crag whale! (maybe cheating, but only by a few million years.) The vertical lines represent glissanders, up the musical scale, over several octaves.



If whale song is not for you,  
how about processes?  
*Storms in the Four Seas*  
*Interludes* is from Benjamin  
Brittain's opera *Peter*  
*Grimes*.

Pottery (Chillesford Ware) is made at Butley Pottery, using Chillesford Clay from Chillesford – a very geological souvenir (and useful!).



## LITERATURE AND POETRY

Perhaps there is something here for you:

John Ellor Taylor, Curator of Ipswich Museum was a prolific writer. For example, *Geological Stories* 1873 includes:

What a piece of Purbeck Marble had to say!

“in this civilised country, where old churches abound, I may have formed a portion of the fonts in which they were christened, or the pillars of the Early English doorway by which they will be carried to receive the last sacramental rites. As a slab near the altar, some of them may have stood on me whilst they took upon themselves the solemn duties of matrimony, little dreaming of the lost lines of generations the obscure stone at their feet could tell them about.”

*What we did to Father* by Roy Lewis 1960 (reprinted as *The Evolution Man* in 1963) is Ernest the Ape-man's memoirs of the life of his father in Pliocene/Pleistocene times in Africa. Roy Lewis was born in Felixstowe in 1913 and studied philosophy at Oxford.

Pits and processes are well covered by George Crabbe and Sir John Betjeman (below). Not quoted here, *Oratio Capitalis pro Rostris* by R R Marrett (The Oxford Magazine May 9th 1912) is good fun about Red Crag flints, whilst less so is *Nucula cobboldiae* by Richard Cobbold (in *Valentine Verses*, published by E Shalders 1827) commemorating a fossil crag shell.

George Crabbe mentions crag pits in *The Borough* (1810)

“ Our busy streets and sylvan walks between  
Fen, marshes, bog and heath all intervene;  
Here the pits of crag, with spongy, plashy base,  
To some enrich the uncultivated space.”

Sir John Betjeman mentions processes in *Felixstowe* (in *Collected Poems* 1958)

“ With one consuming roar along the shingle  
The long wave claws and rakes the pebbles down  
To where its backwash and the next wave mingle.”

Dunwich

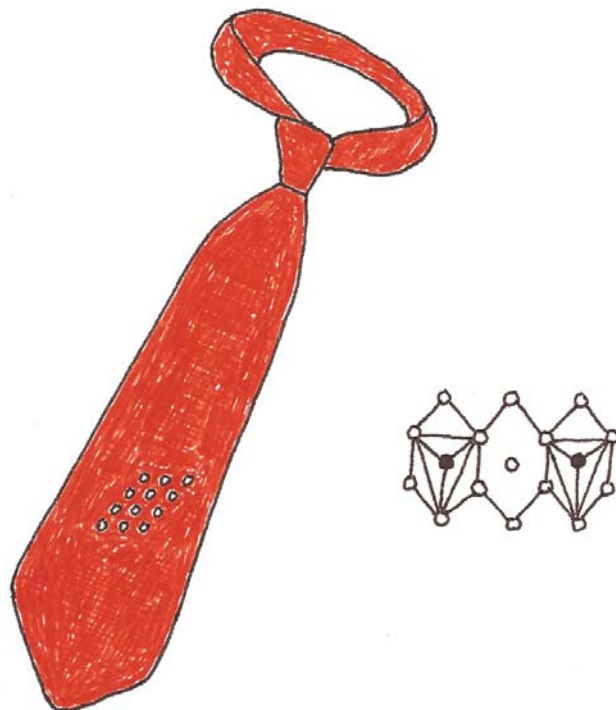


## TEXTILE DESIGN

The Festival Pattern Group of the 1951 Festival of Britain was a group of scientists and manufacturers who used diagrams of atomic structures (from X-ray crystallography) for patterns on everyday objects.

Vanners & Fennell, textile manufacturers of Sudbury, Suffolk, produced seven different tie silk fabrics designed by George Reynolds, based on a rather free use of mineral structures. The fabrics were shown in the Dome of Discovery and in the Regatta Restaurant at the 1951 Festival. Ties were manufactured by Welch Margetson at retail price of 21 shillings, and were very popular with crystallographers.

The design based, rather freely, on the China Clay (kaolin, kaolinite) diagram was reissued in 1960 so that ties could be made for the International Union of Crystallography conference in Cambridge 15-24 August 1960.



Also see:

G.W. Brindley & K. Robinson. 1946 *The Structure of Kaolinite*. Mineralogical Magazine, no.27, pp.242-253.

*The 'Atomic' Tie*. East Anglian Daily Times, 16 April 1951.

*Working in secret, local firm has produced unique Festival tie silk*. Suffolk Free Press, 17 April 1951.

Mark Hartland Thomas. 1951. *Festival of Britain Souvenir Book of Crystal Design*. London Typographical Designers, London.

Lesley Jackson. 2008. *From Atoms to Patterns. Crystal structure designs from the 1951 Festival of Britain*. Richard Dennis.

## TRADES IN HISTORY

Directories are a good source of information for historical research purposes. Here is a selection of Suffolk geology-related trades taken from White's 1884 volume.

### Amber and Jet Cutters:

- John Larrett, Amber and Jet Cutter, Trimley St Mary.

### Artificial Manure Manufacturers:

- Edward Packard & Co., Bramford (including superphosphate of lime).
- Prentice Brothers, Stowupland (including superphosphate).

### Brick and Tile Manufacturers:

- E & Edward Charles Gibbons, Ipswich, including:
  - Alexandra Brickworks, Chilton, near Sudbury.
  - Crown Brickworks, Aldham near Hadleigh.
  - Valley Brickworks, Saint Clement's, Ipswich.
  - Victoria Brickworks, Saint Margaret's, Ipswich.
  - White Elm Brickworks, Saint Clement's, Ipswich.
- John Morgan & Co., Trinity Brick Works, Fore Hamlet, Ipswich.
- J.B. & F. Bennett, Stoke brickyards, Rectory Road, Ipswich.
- George Reuben Wright and John Wright, Woolpit (for specimen white bricks see New Corn Exchange, Bury St Edmunds, and Stowlangtoft Hall).

### Cement Manufacturers:

- Burgh Castle Portland Cement Co. Limited, Burgh Castle, near Gorleston.
- James Lucas King, farmer & Roman cement stone merchant, Shotley.

### Coprolite Merchants:

- William Kersey, farmer and coprolite merchant, Waldringfield.
- George Ling, coprolite merchant, The Lodge, Great Bealings.

### Earthenware Manufacturers:

- Henry & Joseph Watson, Wattisfield.

### Engineers and Machinists:

- Adams & Son (including manufacture of coprolite mills), Stowupland.

### Gravel Merchant:

- Edward Fincham, farmer, shopkeeper and gravel merchant, Beck Row.

### Gun Flint Manufacturers: (all at Thetford Road, Brandon)

- Robert Curson, gun flint and whiting manufacturer and lime burner.
- James Field, gun flint and whiting manufacturer and victualler, Fox & Hounds.
- Mrs Lucy Eunice Snare, gunflint manufacturer.
- Robert John Snare, gun and ornamental flint manufacturer.

### Lime Burners & Merchants:

- Robert A. Allen and Sons, lime and brick manufacturers (and chalk), The Grove, Ballingdon Street, Sudbury.

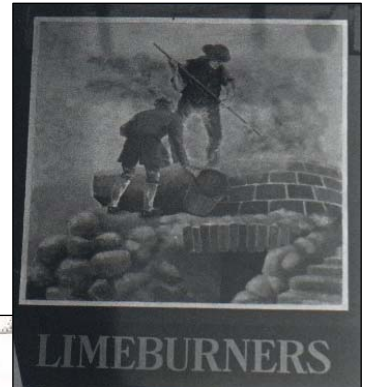
### Millstone Makers:

- Whitmore and Binyon (including millstone makers), Wickham Market.

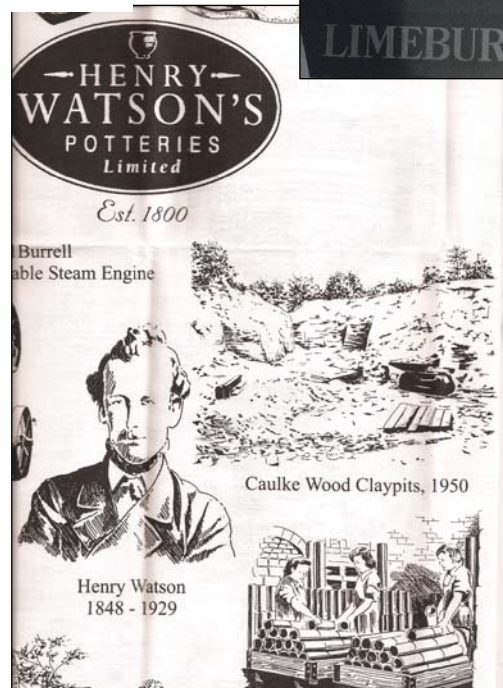
## KEEPING IDEAS ALIVE

The Suffolk landscape bears evidence of long gone geology-related trades in the form of brick pits, marl pits, coprolite diggings etc. Many are kept alive in the form of pub names, street names and in related crafts.

The **Limeburners pub at Offton** is situated on the Chalk outcrop of the Gipping valley and is named after the Chalk pit and lime kilns nearby. These are private property, but old photographs of the pit and kilns adorn the walls of the pub, with more on their web site [www.limeburners.co.uk](http://www.limeburners.co.uk)



The 19th century pottery industry run by the Watson family at Wattisfield used local Pleistocene clays as its raw material. Nearby Calke Wood RIGS, a privately owned pit in 'Norwich Crag' sands and clays has been linked to this industry. Today, **Henry Watson's gift shop** on the site of the original pottery sells a large range of kitchenware, including a 'geological' tea towel with images of kilns and clay pits, and the last kiln, working until 1964 can still be seen. For more photos (including a clay pit) see [www.henrywatson.com](http://www.henrywatson.com)



In the 19th century coprolite (phosphate nodules) was quarried from the base of the Red Crag for use as fertiliser. An old processing factory building stood in **Coprolite Street** on the Ipswich Docks until the 1970s. The street name has been retained and University Campus Suffolk has Coprolite Street as its Ipswich Waterfront address.

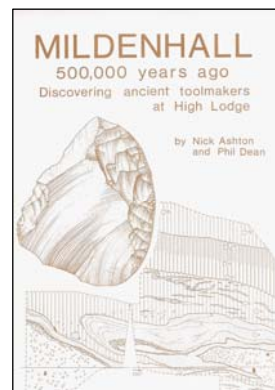
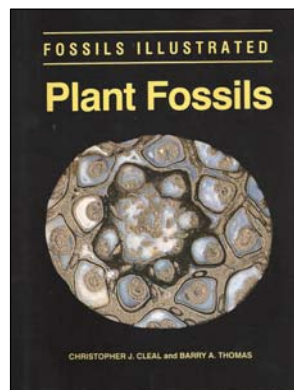


Coprolites in a Red Crag exposure at Bawdsey

## BOOKS, FILMS, MAGAZINE, MICROSCOPY

The Boydell Press of Woodbridge used to publish *Fossils Illustrated*, a series of high-quality accounts of fossils. They included *Graptolites* by D Palmer and B Rickards, *Trilobites* by H B Whittington, and *Plant Fossils* by C J Cleal and B A Thomas. *Plant Fossils* (1999) has 188 pages (with 41 text-figures) and 128 photographic plates.

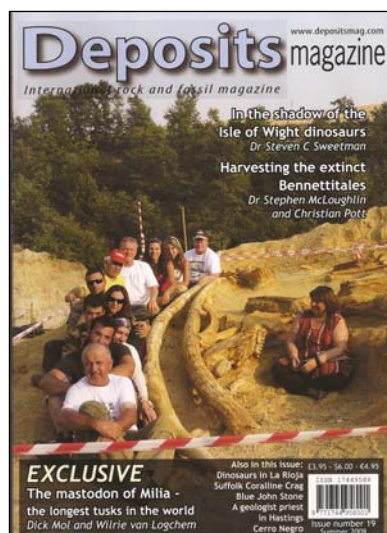
Following excavations in 1988, Mildenhall Museum published a booklet *Mildenhall 500,000 years ago. Discovering ancient toolmakers at High Lodge* by N Ashton and P Dean. 15 pages with colour illustrations.



Boulton-Hawker Films Ltd of Hadleigh, used to hire out or sell films, including in the 1970s – *Chalk*, *Prehistoric Man in Europe* and *The Work of the Sea*.

Northern Biological Supplies of Martlesham Heath used to produce microscope slides. These included geological mounts: K116 *Sand from the Red Crag*, K120 *Foraminifera from Chalk*, and rock section K226 *Conglomerate: Hertfordshire Puddingstone (Tertiary Hertfordshire)*.

UKGE Ltd. of Reydon publishes *Deposits Magazine*. It includes articles aimed at professionals, enthusiasts and beginners, and covers UK and international topics on rocks, fossils and minerals. They also supply geological equipment - see [www.ukge.co.uk](http://www.ukge.co.uk).





## POSTCARDS

Besides producers and publishers of postcards, they are also a subject for collectors. They may also often be of interest to students of social history and rural life.

Postcards produced in Suffolk include:

- A series showing 19<sup>th</sup> century carved amber (carp, Buddha, scent bottle, face mask), by the Amber Museum in Southwold.
- GeoSuffolk's *Suttona Antiquior*, produced by Roger Dixon for the Geologists' Association festival of geology 2009. This artist's impression of life around an island of Coralline Crag during Red Crag sea times, 2.5 million years ago, was created by Louis Wood.

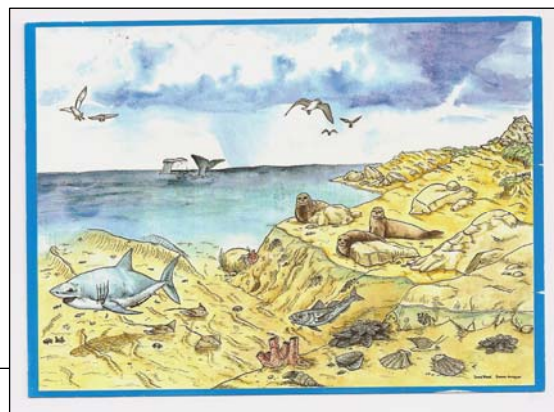
Subjects from just outside the county include:

- A set commemorating the centenary of the 1884 Essex earthquake, produced by the Colchester Postcard Club.

Also of interest, the Royal Belgian Institute of Natural Sciences, Brussels, produced a postcard showing teeth and vertebral column of *Carcharodon megalodon* from the Miocene of Antwerp. This gigantic shark (the generic name has been changed) is also well known from the Crag of Suffolk.

Appliqué postcards have embellishments added to them. An example of these is a postcard of Holbrook where the appliquéd material is engraved copper. This is actually of Holbrook, Arizona, USA, and the postcard was produced by the Kopper Card Co. of Salt Lake City, Utah.

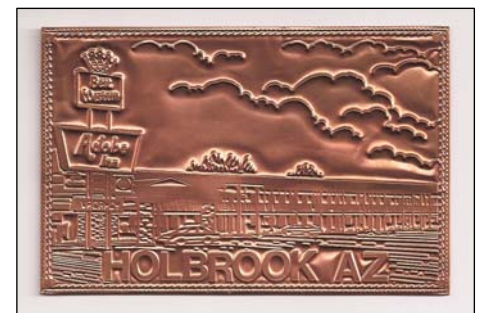
Local artists include George Parsons-Norman (1840-1914). Born in London, he moved to Lowestoft in 1880. Many of his paintings – he did a number of the Broads – were published as postcards, some by Jarrold & Co of Norwich.



Suttona Antiquior



*Carcharodon megalodon*: Antwerp



Holbrook Arizona

## A FOREST, A BOULDER AND A MAMMOTH

A Boulder. At Mid Suffolk DC's Needham Lakes children were keen on something big to climb on. So what better than a giant (artificial) rock, inspired by Needham Lakes' very own (real) glacial erratic rock. There is a high friction (rough) surface, joints and bedding planes provide hand and footholds, and an ammonite is fun for children to find.



A Forest. The unique-to-Suffolk Coralline Crag deposit is of marine origin, but has yielded fossil pollen, blown into the sea from nearby land some 3¾ million years ago. But how to interpret these microscopic fossils? For geological societies visiting a geological SSSI at Sutton, an innovative interpretation is the 'Pliocene Forest'. With permission from and interest of the landowner, with advice from a Cambridge University professor, and a grant from the Curry Fund of the Geologists' Association, the 'Pliocene Forest' is growing. GeoSuffolk member Barry Hall, a horticulturalist by profession, guides work

with the plants. Another GeoSuffolk member, Roger Dixon is communicating this work to the GA, see *The Pliocene Forest* in the GA Magazine vol.8, no.3, 2009.



Perhaps the most exotic plant in the forest is *Sciadopitys* (Umbrella Pine), a unique ever-green now endemic to Japan. After nearly 4 million years it returns to Suffolk!

The site is viewable from the public footpath and as the years, decades and centuries pass, we fully expect the 'Pliocene Forest' to provide information as yet un-thought-of to those yet to be born.

A Mammoth. This Mammoth Hunting Licence was first issued a long, long time ago, but is still available although some species haven't been reported for a while!  
CM/RM 2010

