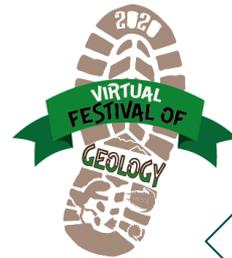


# Geological Sights! Central England

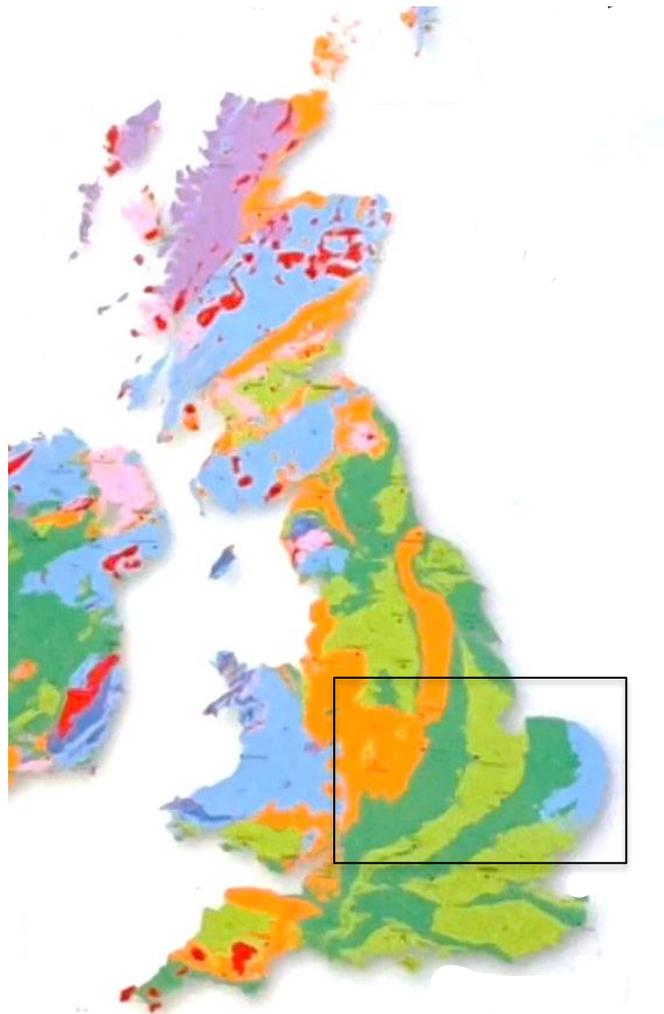
Harrow and Hillingdon  
Geological Society



 @GeolAssoc

 Geologists' Association

[www.geologistsassociation.org.uk](http://www.geologistsassociation.org.uk)



# Central England



# Chalk rafts within mid-Pleistocene glacial deposits, Overstrand

The Chalk is the bedrock here.



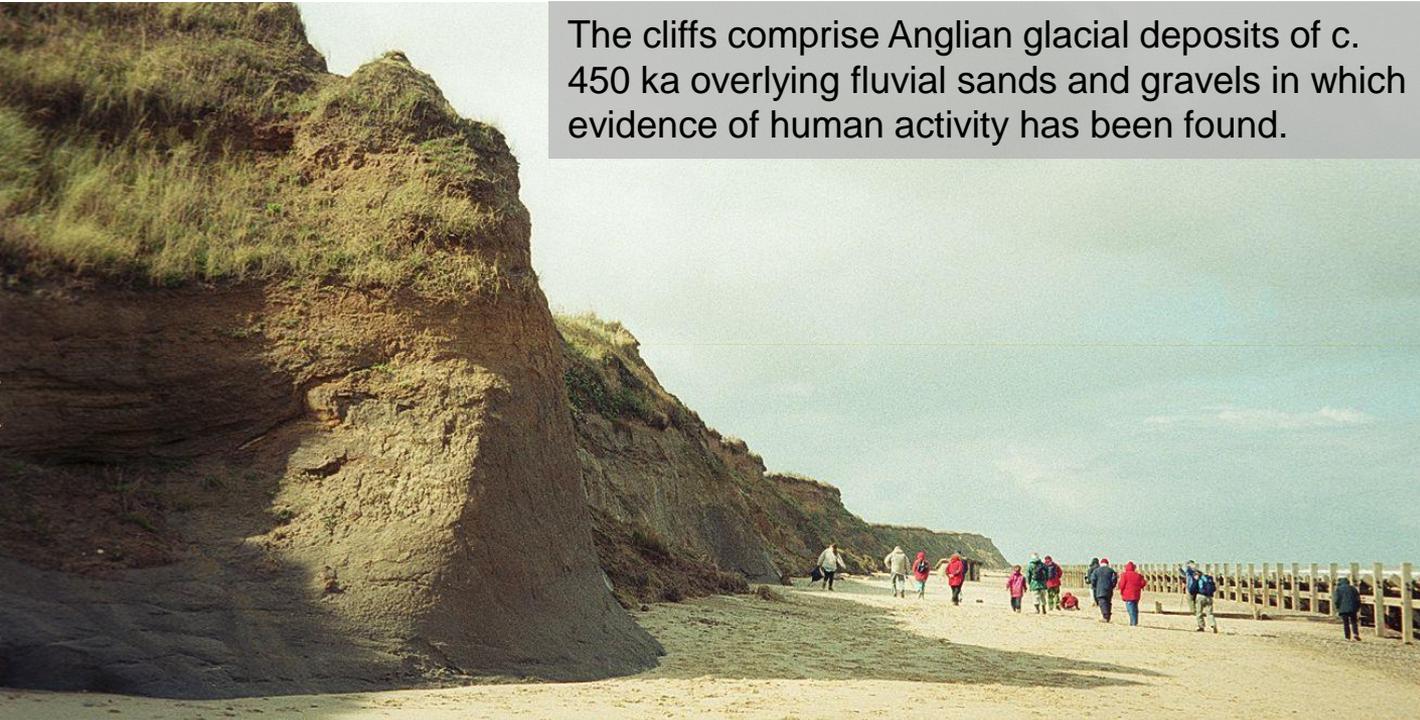
Wroxham Crag Fm.



The chalk blocks were detached by the Anglian ice sheet at c. 450 ka, moved several hundred metres and stacked up here. Pushed by the ice front, they were embedded in marine pre-glacial sands and gravels of the Wroxham Crag Fm.

## Norfolk 2001

The cliffs comprise Anglian glacial deposits of c. 450 ka overlying fluvial sands and gravels in which evidence of human activity has been found.



Anglian glacial deposits

Happisburgh. Along with other sites in Norfolk and Suffolk, evidence of the earliest human activity in Britain has been found here under the Ancient Human Occupation of Britain project. The first discovery, a handaxe, was made near here in 2000. The group is walking towards a site discovered in 2005, dated at 950-800 ka, where flint artifacts were found. Nearby in 2013, human footprints were uncovered.

# Norfolk 2001

Charnwood Lodge Volcanic Formation  
Debris flow (Ediacaran age, c.635-541 Ma);  
island arc setting.



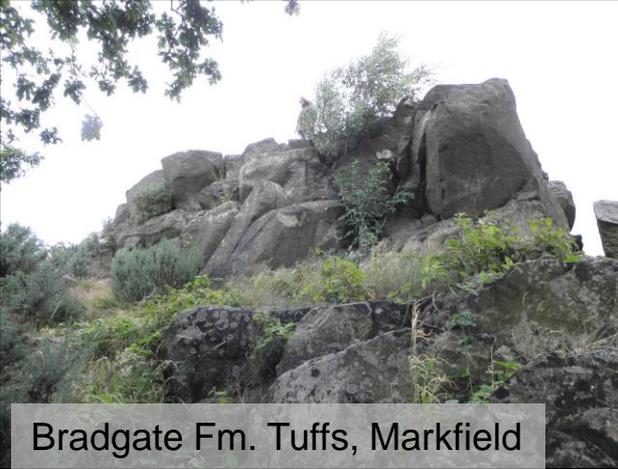
Local  
Ediacaran  
fossils,  
Bradgate  
Park  
Visitor  
Centre



Moira Furnace Museum



Charnwood Forest, Leicestershire, 2017



Bradgate Fm. Tuffs, Markfield



Charnwood Lodge Volcanic Fm.

Tuffs of Bradgate Formation (Ediacaran age)



Memorial Crag, Bradgate Park

# Charnwood Forest 2017



2009. The quarry is on a steep anticline



2009. Ripple marks at right



1979

# Wren's Nest, Dudley

Wren's Nest was designated Britain's first National Nature Reserve for Geology in 1956. In the Silurian Much Wenlock Limestone Formation, it is famous for its diversity of fossils.



The limestone was worked above and below ground to supply the Black Country's iron and steel works with flux.

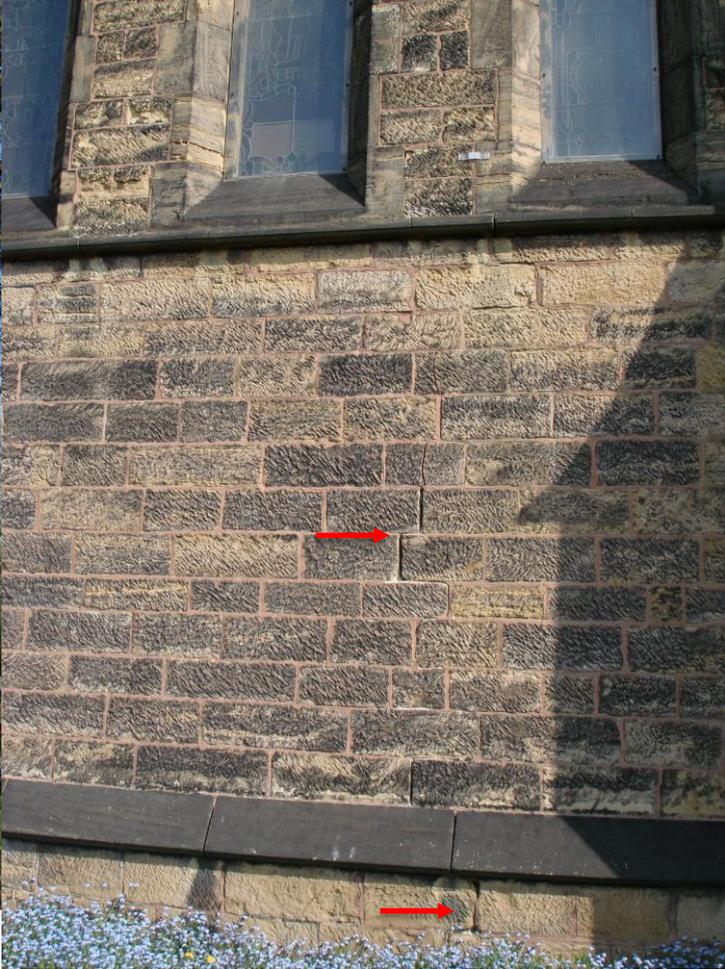


Wren's Nest, Dudley, 2009

# Nodular Limestone, Wren's Nest



Colonial coral – *Favosites*



St Mark's Church, Pensnett near Dudley ('Cathedral of the Black Country') suffered slight damage in the 2002 Dudley Earthquake (right). It was built 1846-49 of locally quarried Gornal Sandstone of late Silurian age.

# Black Country 2009



Left: Doulton's Claypit in mudstones and sandstones of the Coal Measures. It is on an anticline exposing late Silurian sandstones (lower left). Saltwells Nat. Reserve.



Upper right: Columnar jointing in dolerite, Barrow Hill near Pensnett (Carboniferous).



Lower right: Dudley No. 1 Canal (Brewin's Section). Tunnel opened out 1858 to form cutting through Wenlock Limestone (Salt-Wells Nature Reserve).



# Black Country 2009

Hobb's Quarry, Longhope, Gloucestershire  
Wenlock-age reef limestones (Silurian), 2008



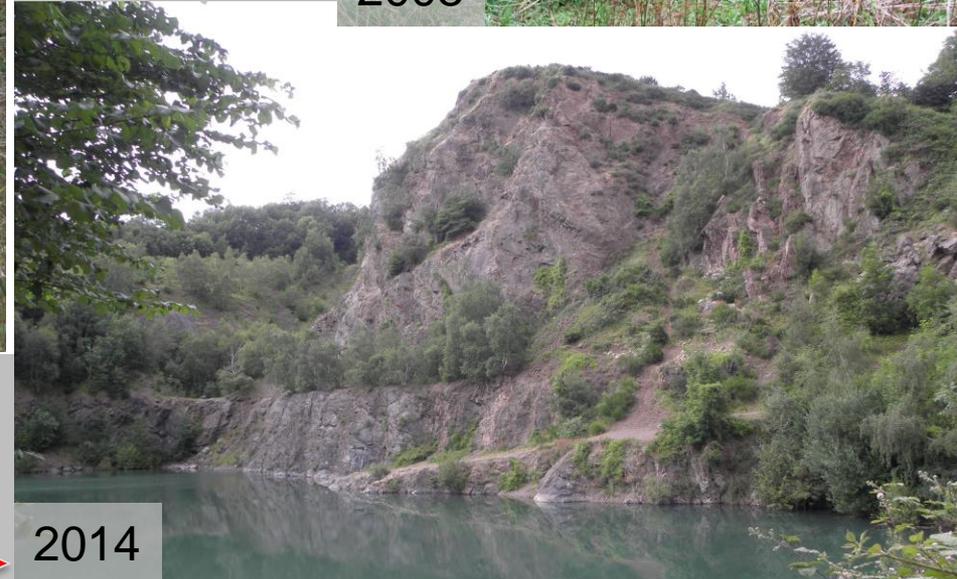
Linton Quarry  
near Ross-on-  
Wye,  
Herefordshire.  
Silurian  
Wenlock to  
Pridoli rocks



2008

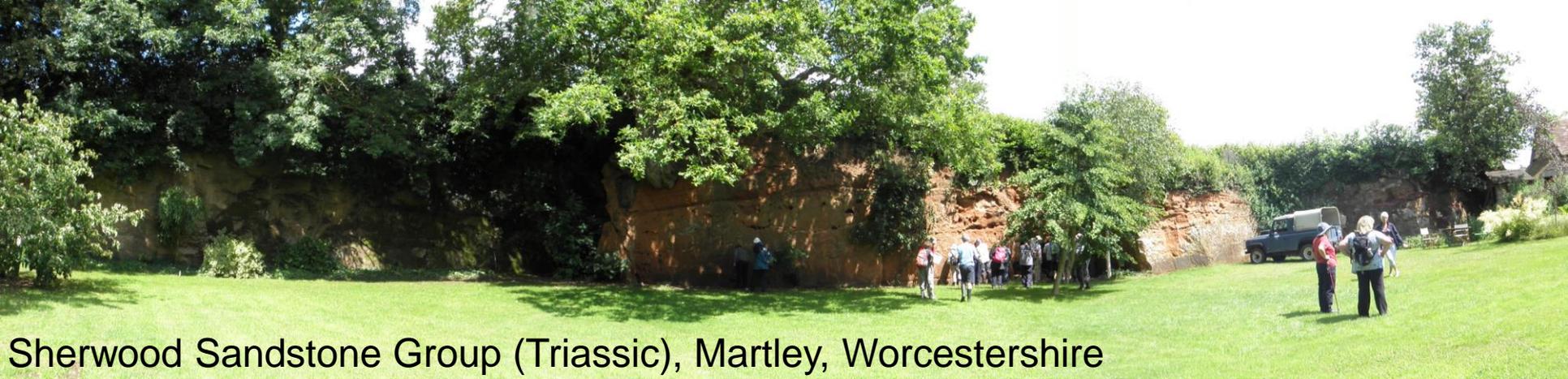


Gullet Quarry, Malvern  
Hills. Igneous rocks of  
the Malverns Complex  
(age c.680-670 Ma)



2014

# Abberley and Malvern Hills Geopark



Sherwood Sandstone Group (Triassic), Martley, Worcestershire



Tank Quarry,  
Gt Malvern



Art installation, Malverns



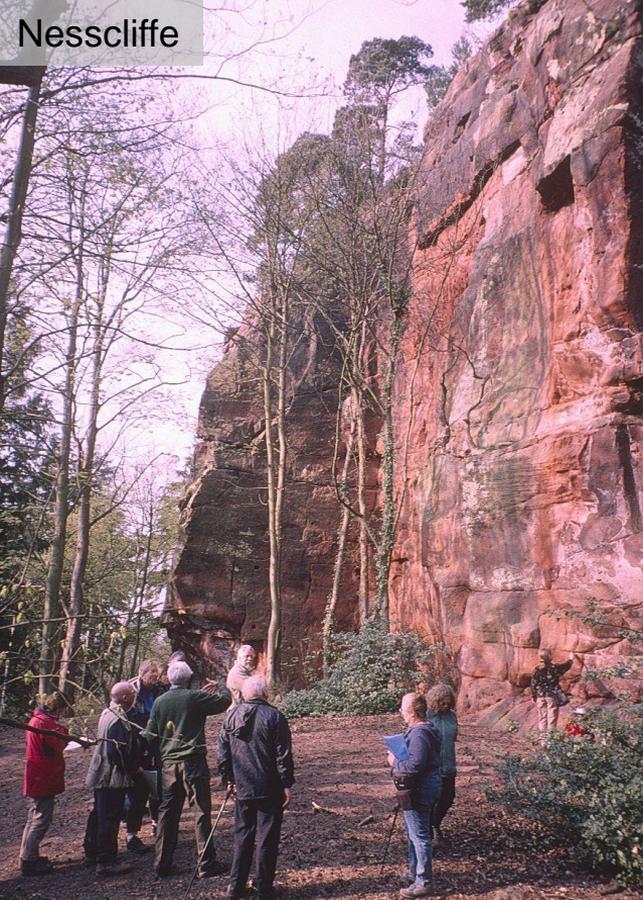
# Abberley & Malvern Hills Geopark 2014



Wenlock  
Limestone  
Formation &  
Lower Ludlow  
Shales Fm  
(Silurian).  
The quarry is  
now flooded.



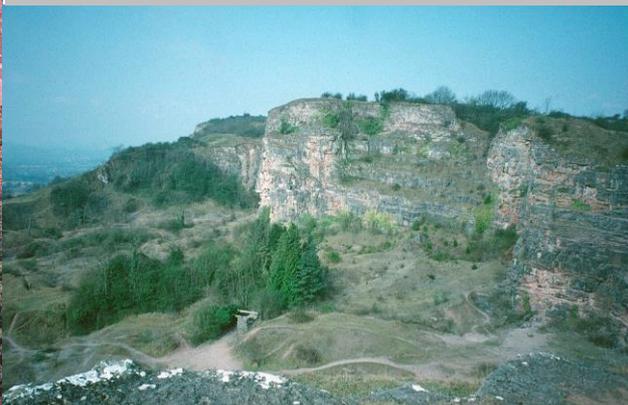
Shadwell Quarry, Wenlock Edge, Shropshire, 1990



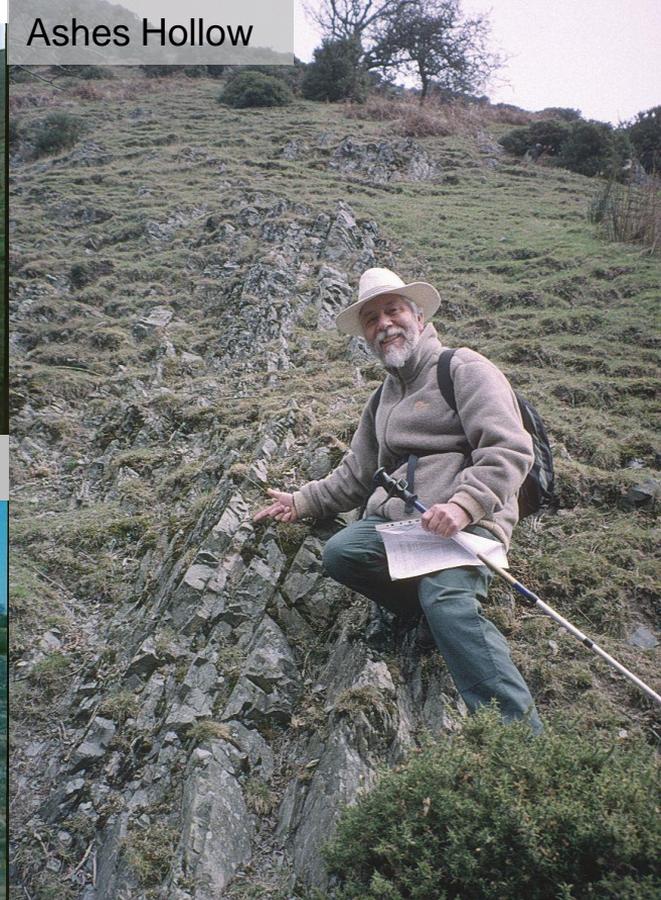
Sherwood Sandstone (Triassic)



Ashes Hollow, Long Mynd



Llanymynech Hill: Carboniferous Lst.



Tuff layer, Burway Group (Eldonian)

# Shropshire 2003



Dune-bedded desert sandstones of the Bridgnorth Sandstone Formation (Permian). Kinver Edge is well-known for its rock houses.



Kinver Edge, Staffordshire, 2009



This quarry near Stoke-on-Trent is in sands and gravels of early Triassic age laid down by a fast-flowing braided river system crossing a desert.

Hulme Quarry (Park Hall Country Park), Staffordshire, 2011



Silurian basaltic lavas in the Tortworth Inlier, Cullimore's Quarry, Glos., 2006



2012

Carboniferous Limestone, Wick Quarry, Glos.

# Gloucestershire

Cattybrook  
Farm Quarry  
near  
Almondsbury  
in South  
Wales Coal  
Measures  
Group.  
Mudstones  
worked for  
brickmaking.  
1989.



Celestite, Mercia Mudstone  
(Triassic), near Wickwar, 1989

Gloucestershire

Celestite stockpile, 1989

Tytherington (South) Quarry,  
Carboniferous Limestone



The quarries cut through the Black  
Rock Limestone and Gully Oolite.

Gloucestershire 2011



The tunnel connects the two quarries at Tytherington, passing through the Gully Oolite Formation.

Gloucestershire 2011



Edgehills Quarry near Cinderford. Cromhall Sandstone Formation, part of the Carboniferous Limestone (Lower Carboniferous)



Pennant Sandstone, Upper Carboniferous, Blackpool Bridge near Danby Lodge



Tintern Sandstone, Shakemantel Quarry, Upper Soudley. Late Devonian-Early Carboniferous

# Forest of Dean, Gloucestershire, 1986