

## Science and Nature Group

### Building Stones in Stratford-upon-Avon, Friday 12<sup>th</sup> April 2013

A very good sized group met in the churchyard of Holy Trinity to walk around Stratford-upon-Avon to view the various building stones used around the town. Our group leader for the afternoon was Hugh Jones from the Warwickshire Geological Conservation Group. He proved to be very knowledgeable and could identify and tell us about the various local stones. Holy Trinity Church was built, rebuilt and added to at various periods up to the present day and, as a result, there are several types of stone in the fabric. These include Blue Lias from Wilmcote, Warwick Sandstone, Arden Sandstone, Cotswold Limestone.



Hugh Jones telling the group about the fabric of the church.

Looking at the stone of the Chancel exterior wall - includes Blue Lias and Arden Sandstone, plus others.







East window of church. The wall looks to be multi-coloured, indicating a variety of stone in the fabric. The window space is outlined in a darker stone, possibly Cotswold limestone. Whilst we were walking around the church we came across two workmen attending to some restoration work on the north wall.

We continued to walk towards Stratford town centre by way of the Theatre Gardens, pausing at the Summer House in the gardens that was used by the Brass Rubbing Centre until it closed in 2012. The front of the portico was interesting as it was made from a fine grained, smooth sandstone. The rest of the building was not as fine and the finish of the interior of the portico was a cement skim resembling the front sandstone and covering over inferior materials used internally.







Walking on from the Summer House we passed along in front of the Theatre, which is mostly brick, and across the Tramway Bridge and paused on the Swans Nest Car Park to look at the rear wall of a cottage. This was almost entirely built from Blue Lias stone.

Just a few steps along we could look at the Clopton Bridge, built in the 15<sup>th</sup> century from Arden Sandstone with parapets of Cotswold Limestone.



The Town Hall was built in 1767 by Robert Newman of Whittington, builder and mason. However, it is not known if he designed it. It is clad in a fine grained light cream coloured limestone.

Many of the older buildings are of tudor origin with timber frames. Often the frames are set on stone foundations made from local limestone (Lias). The Shakespeare Hotel is one such.



The Guild Chapel was originally built in the 14 & 15 centuries. There have been several phases, rebuilds and restorations,

plus change of use over the centuries. The main part of the Nave is of Arden sandstone for the internal walls with Hornton stone external cladding. The Chancel seems to be clad externally in White Lias limestone.



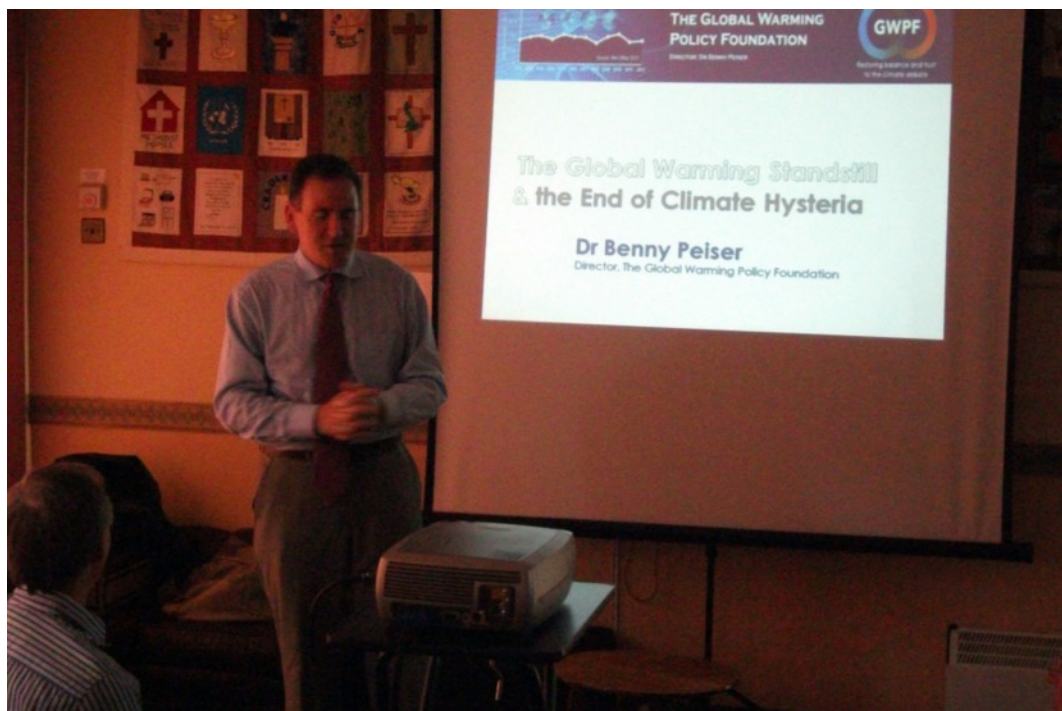
We all had a very enjoyable walk around parts of Stratford and could appreciate the differing stone types we could see around. Unfortunately, there are no local quarries in operation so stone is imported from all over for building operations now, although there may be one small quarry about to re-open.

We finished the afternoon with tea at Hall Croft, one of the Shakespeare houses. Thanks are due to Geoff Bridgewater for organising and to Hugh Jones for leading the walk.



**Talk by Dr Benny Peiser of The Global Warming Policy Foundation**

## ***The Global Warming Standstill And the end of Climate Hysteria***



Dr Peiser gave a very informative and entertaining talk on the subject of the apparent standstill in climate warming which provoked a very lively discussion after the talk. The talk covered aspects of the debate and the ending of debate in official circles - the current G8 talks do not include any discussion of the subject, whereas it has been included in G8 and G20 talks for the past 15 years or so. The various graphs that have been used by government to illustrate the rise in temperatures were shown with a discussion of the ways in which the data can be manipulated to back up the claims being made. Finally, a discussion of the newer sources of fuel, such as natural gas derived from 'fracking' shale oil bearing strata, were discussed with the variation of fuel prices around the world. Those countries that signed up to the various agreements have all ended with high energy prices which impacts on industrial and commercial competitiveness.

A very good talk with excellent and lively discussions and questions.

## Science and Nature Group visit to Pure Recycling, Ettington

Friday 5<sup>th</sup> July 2013

We visited the waste recycling plant at Ettington, just south of Stratford, that Stratford on Avon District Council use to process the Dry Recycling (blue lidded bins). Other councils across the West Midlands also use this facility. The facility is a commercial operation and produce a profit from the fees from the various councils that use the facility and also by selling the processed waste to material producers in the UK and across the world, including China. Even the small percentage of waste that is produced has a value and can be burned to release energy.



Two photos of U3A members in the facility and looking at the processed waste.



Second group from U3a just leaving the facility.



## Science and Nature Group visit to Cotswold Water Park and Chedworth Roman Villa

Friday 27<sup>th</sup> September 2013

Ten members went to the Cotswold Water Park hoping to see some exciting bird life, particularly aquatic types. Organised by Bob and Chris Heaps, the whole day passed off without incident and we all enjoyed our visits. Unfortunately, the birds had not been informed that we were coming and had gone off about their own business. We did see a few swan, quite a few coots, and a heron. I heard rumours of a grebe but could not testify myself. A crayfish was spotted in a small river alongside one of the lakes. There are reputed to be carp up to 35lbs in one of the alkes but we did not spot them. We congregated at the Gateway Visitor Centre for coffee and a talk from a member of the Trust that runs the Centre. After that we went on a circular walk around a few of the 120+ lakes.

The National Trust run Chedworth Villa site is well worth a visit. In recent years there has been much investment in new buildings. The Visitor Centre has been completely rebuilt with the addition of a much needed cafe. The Western range of villa buildings have been encased in a new building that both conserves and displays the mosaics and othe features in a much better fashion. Mosaics are now on display in the main gallery along the eastern side of the buildings range that have never been on display before. There are plans to do more excavation on the southern range of buildings that have never been



Gateway Cafe & Visitor Centre



Ibis Lake with "New England" style houses around. Large carp are reputed to live in the lake.

**Science and Nature Group visit to Cotswold Water Park and Chedworth Roman Villa**



Coots at play on two different lakes near Visitor Centre.



The group pictured at Chedworth Roman Villa in sunshine near the end of the northern range of buildings.

The Museum and Office building - it started life in the Victorian period as a hunting lodge for Lord Eldon who owned the whole site and funded the initial excavations in the 1860s.





**Science and Nature Group visit to Cotswold Water Park and Chedworth Roman Villa**



Top left - Mosaic floor in the Dining Room (Triclinium)

Top Right - Mosaic floor in main gallery along front of building. Colours are muted due to effluorescence. This will be cleaned during the winter closed period.



Middle left - mosaic floor and exposed hypocaust heating system under.



Bottom left - Hypocaust underfloor heating in bath house - notice the arch from where the hot gases issue from the fire.



**Science and Nature Group visit to Cotswold Water Park and Chedworth Roman Villa**



View of north range of buildings.

There are mosaic floors under the grass on the right and under the pathway that runs along in front of the buildings. It is hoped to display them in the future when funds can be secured to build protective buildings.

Pool filled by trickle from natural spring in the hill side. The majority of the water is piped around the site to supply the visitor centre and for watering plants, etc.

There would have been a shrine at this point during the Roman period.

The villa had its most productive period from 300 to 360AD. Some sort of occupation appears to have continued into the 5<sup>th</sup> century.





## Science and Nature Group Christmas Meeting and Quiz

Over twenty members of the Group gathered for a Christmas social and quiz, with seasonal refreshments provided by the members and organised and arranged by Sandra and Heather. Our quizmaster was chairman Geoff, although one or two answers were disputed during the marking, notably chemical symbol S is not Tungsten after all. Where have we been going all this time?

Teams of 4 competed for a most amazing prize - demonstrated several times by the quizmaster in order to generate a competitive edge. Top mark and the prize went to the comprising John and Caz, Sarah Gretton, and John Shelby. Pictures below show the contestants, etc. A very enjoyable time was had by all.



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