GEOconservationNEWSletter

Summer 2022 issue

Looking to the Summer...

Welcome to the first of the 2022 GCUK newsletters. My thanks as always to the contributors - with the usual follow up plea for more items, and by the deadline please, for the next newsletter! Just a few of the varied activities and programmes offered by some, but a long way from all, member groups are covered. It's pleasing to see a good range of Zoom (and who'd heard much of that before...), and some in-person, events for the year's first half or so; likewise opportunities to participate in practical site-based conservation work.

Of course, it all relies on the endeavours, often over many years of dedicated volunteers, too commonly neglected by the various academic and national honours systems. Not that such neglect of geoconservationists and geologists, other than much lauded but usually deserving professors, is anything new; so, it's really good to mention herein an event in Lyme Regis in May. I'm sure most of us remember to say a well-earned "thanks" after attending an event to both the 'main act' and the organiser(s); better still, why not contribute a note or article to this newsletter to generate wider recognition?

I believe we all recognise the importance of publicising our geoconservation work but most of us probably wouldn't be comfortable at being labelled an 'influencer' when we actually do something rather than just vlogging about it. We do need, however, especially when geology is again facing decline in the UK's schools and universities, to better embrace the digital media so as to engage with those potential geoconservationists. I hope your events go well and do send me... *Tom Hose*

Bedfordshire GEOLOGY GROUP *bringing landscape to life*

What We Did in Bedfordshire in 2021!

Again Covid restrictions stopped a lot of our group's work in the early part of 2021 and most of our monthly meetings were once again via Zoom. At the end of 2020 Bedfordshire Geology Group (BGG) became involved in a new and interesting project with The Geology Trusts (GTs) and Natural England (NE). The group were contracted to work on condition monitoring several geological Sites of Special Scientific Interest (SSSI) across East Anglia but, due to Government restrictions, this had to be postponed until 2021. The project ended in March with nine SSSIs throughout Bedfordshire, Cambridgeshire and Hertfordshire being monitored, and their condition reported to NE via the GTs. In Bedfordshire just one site was on NE's list for monitoring – Biddenham Gravel Pit.

Once Covid restrictions were lifted, BGG began to hold some events outside. Following on from our monitoring of Biddenham Gravel Pit SSSI, we held a site clearance in July 2021 when we were able to, once again, reveal the Ice Age terrace gravels *(below)* that tell the story of

changing environments along the River Great Ouse in this area.

During the autumn, we were able to provide long-delayed walks for two local groups of the Wildlife Trust that wanted to find out more about the local geology. Members of the Flit Vale group walked around the Maulden area, and the Bedford group visited Ampthill. We looked at natural rock exposures and building stones and discussed how geology had influenced the location and history of these settlements and the people who lived there.

As regards finds in 2021, an enquiry was received about some spherical objects *(below)*. These were probably found in or around Munday's Hill quarry in Heath and Reach but the date of discovery is uncertain because they were re-discovered by a BGG member, Bernard Jones, when sorting through other finds. It is possible they are part of the glacial till layer, which includes some Chalk derived gravels, atop the Greensand Ridge in that area which have subsequently been washed out and redeposited. These were identified as flint nodules, sometimes referred to as "Cannonball flints". Flint nodules can form

around fossil sponges or possibly, but less common, sea urchins. The latter usually have some indication of the knobbly surface texture of the sea urchin shell (or 'test'). If cracked open (not advised unless wearing goggles), the sponges may not be obvious other than as hollow moulds (sponges being soft and rapidly decayed). The flint nodules show some iron-staining on the surface with some irregular, randomly spaced indentations over the surface measuring about 3-4mm in diameter. Another pair of flint nodules were discovered in Dunstable by Marie Dawkins. One of these has been split open *(right)* and the detail inside can clearly be seen.

Another exciting find was the discovery by Matt Bainbridge of some possible Ichthyosaur vertebrae and belemnites *(below)* which he excavated whilst walking

south of the Greensand Ridge. These have not been formally identified. Investigations are ongoing.

A contact, via BGGs Facebook page, advised of some rare rocks *(right)*, albeit loose blocks and not *in situ*, of Hertfordshire Puddingstone in a field in Luton. Some blocks were collected and are now in BGG's vast collection of samples. This rare rock is a silica-cemented conglomerate composed of rounded flint pebbles and cobbles with a matrix of fine sand and silica cement. It typically occurs within glacial till deposits. Perhaps we have discovered “Bedfordshire” Puddingstone!

A remarkable trace fossil was discovered in Sharnbrook. It is in a limestone block *(right)* that was excavated whilst work on a patio was being undertaken. The traces of a burrowing creature, either a type of shrimp or other crustacean, probably made these burrows during the Jurassic.

Finally, 2021 was a huge year for BGG as we were awarded a Certificate of Excellence in a Curry Fund Sponsored Project for our work through the Greensand Country Landscape Partnership. We received notice of the award in March 2021 and held a wonderfully attended celebration event *(below)* in July 2021 at

the Clophill Heritage Trust site at Old St Mary’s church. Here’s to another successful and interesting year in 2022!

Bev Fowlston

Surveying Suffolk's SSSIs.

The Geology Trust again, this winter, asked GeoSuffolk to monitor some geological SSSIs for Natural England. So far, Richard and Caroline Markham with Howard Mottram, have visited five of these. Sandy Lane Pit, Barham is designated for its Pleistocene gravels. Sudbourne Park Pit, Red House Farm Pit and Valley Farm Pit are also under private ownership; designated for their Coralline Crag exposures, we found them all to be in good condition.

Bawdsey Cliff SSSI has 2km of Red Crag exposures, with public access (but make sure you know the tide

times). GeoSuffolk's visit on 28th January was planned because of the low tide in the middle of the day and the forecast for good weather (well, for January!). Erosion by the sea has created some good exposures this year showing *(right)* the Red Crag at the top of the cliff with the London Clay below.

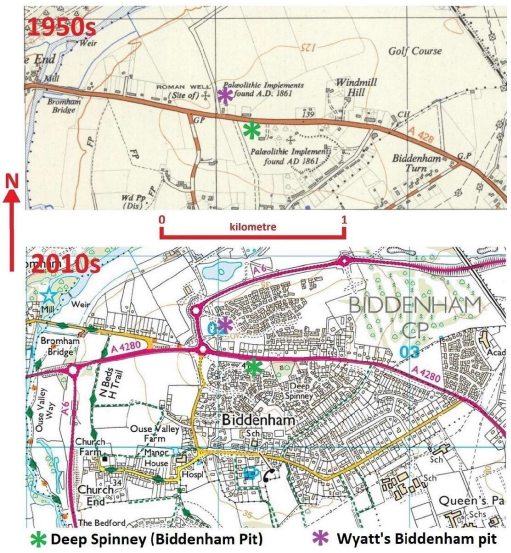
To view the maps and citations for these SSSIs just go to Natural England's designatedsites.naturalengland.org.uk web pages and scroll through the listing. *Caroline Markham*

Better Recognition & Protection for Geohistorical Sites?

All of us versed in UK geoconservation are aware that Government guidance employs 'Local Sites' for non-statutory sites, as distinct from Sites of Special Scientific Interest (SSSIs); whilst such locally designated sites have different names across the UK, all are selected according to their value for: Educational Fieldwork; Scientific Study; Historical Significance; and Aesthetic Qualities. Many of us will have completed numerous copies of the Site Designation Form and will be aware that a geosite may meet one or more of the values for designation. Possibly one of the most difficult, and probably the scarcest, designations applied is that of 'Historical Significance'.

This is because comparatively few sites, even in the UK which could justifiably be termed the 'birthplace of modern scientific geology', can be linked as the designation requires to *important* advances in Earth science knowledge - those that do are often SSSIs. In researching and writing about various geotrails in Europe and the UK I have been struck by the usefulness of the human interest element in connecting modern (mainly non geology) users to a geosite via a specific geologist's (ideally with an image of them) description and/or interpretation of it. This has been particularly so when there is some crossover with local history or archaeology.

One such 'local history' site *(below)* is that of England's only gold mine at Pulloxhill in Bedfordshire; it was marked as such on OS maps until the 1900s. The claim, of course, was false, but it says much about the state of 17th century mineral exploration - that could indeed be its interpretive geological 'handle'. One such 'local archaeology' site *(below right)* is the actual pit [identified as Wyatt's on the maps] at Biddenham near Bedford from which the UK's first Palaeolithic implements where both excavated and recognised in 1861; despite the 1950s map's notation they were not found at the Biddenham Gravel Pit (a SSSI and designated a LGS by the Bedfordshire Geology Group) until 1867. Charles Lyell contemporaneously recorded *"I am laid up for a day or two after an excursion to Bedford with Prestwich and Evans, to see a section where a Mr. Wyatt ...has just found two fine hatchets ... They occurred in working a gravel pit..."* exemplifying it as a site of some historical interest because it was visited by prominent 19th century local and national geologists.



I would suggest that both sites would benefit, in order to protect them (as they are now being rapidly encroached upon by new housing developments), from a broader interpretation of the criteria for 'Historical Significance'. It is their specific *locations*, rather like those blue plaques on buildings (and they're not always on the actual one lived in by the named individual) indicate, that are just as culturally significant as what was formerly found there; despite their appearance and probable lack of scientific geological interest today they are worth protecting as a link with past geological endeavours and the lives and work of individual geologists.

Further Reading

Hose, TA (2018) 'Awheel Along Europe's Rivers: Geoarchaeological Trails for Cycling Geotourists'. Open Geosciences 10, 413-440

Vujicic, MD, Vasiljevic, DA, Hose, TA, Tasic, N, Morar, C, Duric, Markovic, SB (2018) 'A multi-criteria decision analysis with special reference to loess and archaeological sites in Serbia (Could geosciences and archaeology cohabitate?)'. Open Geosciences 10, 333-343

Tom Hose

"Edlesborough Church {in Buckinghamshire] on an even loftier mound poises further north across one of the deep combes with which this country is riven, and commands a brave view of the downs etched against the sky, scarred with quarries and pocked with disused chalk pits like gigantic bird droppings." **(Massingham, 1949, p.38)**

Geoconservation Update.

Last year the Scottish Geology Trust and GCUK organised a successful and well-attended online course on Geoconservation in Scotland. The three sessions covered the basics of Local Geodiversity Sites in Scotland, and how to designate and monitor them. The session recordings and associated resources are available at https://www.scottishgeologytrust.org/geoconservation-in-scotland-course/

We are following this up with a Geoconservation Seminar with Rachel Wignall of NatureScot, looking at the wider picture of SSSI and Geoconservation Review Sites across Scotland and how to help NatureScot identify issues and suggest preventative and remedial action. The seminar will be held online on Wednesday 11th May at 7.30pm.

Meanwhile, Lothian and Borders GeoConservation are making some progress with local site monitoring, and the group is running an informal training session at Aberlady in East Lothian on Saturday 30th ; all are welcome.

Finally, following the success of last year's Scottish Geology Festival, with 110 events engaging 13,000 people in-person and online, the 2022 Festival will run from 1st September to mid-October. There will be plenty of online events on all aspects of Scotland's geology and event proposals are now being accepted.

Further details about all these activities on the SGT website https://www.scottishgeologytrust.org/ or get in touch with Angus Miller engagement@scottishgeologytrust.org.

Angus Miller, Vice Chair, Scottish Geology Trust

'Earth Science On-Site' – an Update.

GeoNews readers with long memories might recall the 'GeoConservationUK Education Project - Earth Science On-Site', written between 2004 and 2008. The Project was funded by DEFRA's Aggregates Levy Sustainability Fund, administered by Natural England. It used 16 former aggregates sites *[see map below]* in England to develop and publish examples of high-quality Earth Science field teaching activities for schools.

They were produced in collaboration with partners in the Earth Science Teachers' Association (ESTA), the Earth Science Education Unit (ESEU), and the National Stone Centre (NSC). The materials were devised to address the requirements of the National Curriculum at key stage 2 [7 - 11 yrs]. KS 3 [11-14yrs], KS4 [14 -16 yrs - GCSE]. They were intended as exemplars and have been adapted by teachers for use at other sites and for other age groups.

The GCUK webmaster, Craig Slawson, kept tabs on the continuing use of the ESO-S website for views and downloads, reporting regularly to the GCUK Executive over many years. The website domains unfortunately lapsed following the sudden passing of Craig in February 2020 coupled with the lengthy shutdown of many organisations from late March 2020 as the Government responded to the Covid-19 pandemic.

However, all the materials have been rescued from CDs distributed at teachers' conferences and backed-up copies on the computers of the original contributors, particularly Rick Ramsdale and Susannah Lydon. Peter and Maggie Williams have uploaded everything onto the GeoHubLiverpool website: geohubliverpool.org.uk/esos/index.htm

There is also a link from the main GCUK and ESTA websites. GeoHubLiverpool already hosts saved teaching materials from other defunct websites, organisations and even a retired teacher. There are eight people involved at Liverpool, so any sad loss of personnel should not be a serious problem for continued access to the materials in the future. A lesson for many organisations? Many thanks to all concerned. *John Reynolds*

"An important preliminary consideration, which might even influence the choice of a site, would be the close proximity of a ready supply of suitable stone, and, to a lesser extent, of timber. For more important projects new quarries might be specially opened and worked, as was the case for York Minster during the fourteenth and fifteenth centuries at Huddlestone, Stapleton and Bramham. Elsewhere, and particularly where none was locally available, stone might be bought wholesale from dealers; Westminster in 1253 ordered large consignments of Caen and Reigate in this way, and much of the material of Ely Cathedral came from the famous Barnack quarries in Northamptonshire. The purchase of worked, or partly worked, stone from particular quarries was by no means infrequent; during the thirteenth century the Westminster accounts record the names various contractors in this line, such as Roger of Reigate, John of Oxford, and the Canons of Corfe, whose quarries, it has been seen, probably supplied to specification much of the worked Purbeck marble used in greater churches. Thus it follows that the more famous quarries automatically developed schools of masoncraft, creating their own standards in rough-dressed or finished stonework, which might be prepared on the spot or in local workshops established for the purpose." **(Batsford & Fry, 1940, pp.11-12)**

The Black Country Geological Society's Summer Programme

Our Indoor meetings are normally held in the Abbey Room at the Dudley Archives, Tipton Road, Dudley, DY1 4SQ, 7.30 for 8.00 o'clock start unless stated otherwise. The same timing applies to online 'Zoom' meetings. Visitors are welcome to attend BCGS events but there will be a charge of £1.00. The planned programme up to the autumn is:

23rd April (field meeting):- Brampton Bryan Park, northwest Herefordshire, led by John Moseley. Meeting point and start time TBC, but likely to be 10.00am at Aardvark Books, The Bookery, Manor Farm, Brampton Bryan, Bucknell, Herefordshire, SY7 0DH, (grid ref: SO370722). We will drive to Brampton Bryan Park to view the landscape and relate it to the underlying geology, which includes Longmyndian sandstones and conglomerates, and Eltonian shales. The trip will also include the Upper Pedwardine, the Llandovery/Tremadocian unconformity, and the boulder bed and channelling at the Eltonian/Leintwardinian contact in Lingen. We will aim to finish around 4.00 - 4.30pm.

25th April (indoor meeting):- *'All the world's a stage: Geodiversity - a natural setting for a natural world'.* Speaker: Dr Jonathan Larwood, Natural England. This talk will look at geodiversity as the foundation – a stage – for the natural world and a vital component of the diverse landscapes with which we're all familiar. The talk will explore the relationship between geodiversity, habitats and species, consider the importance of understanding that relationship and the mutual benefit that an integrated approach to managing geodiversity and biodiversity brings for nature recovery. A number of Black Country case studies will be referenced in the talk including the Wren's Nest and Saltwells National Nature Reserves.

7th May (field meeting):- *'Dudley Museum at the Archives and Wren's Nest National Nature Reserve'*, led by Graham Worton. Joint Field trip with the WGCG. Meet at 10.00am at the Archives building, Tipton Road, Dudley, DY1 4SQ, (grid ref: SO950912) for a tour of displays followed by a field visit to Wren's Nest NNR to look at recent works and to discuss future plans.

15th June (evening field meeting):- *'The Building Stones and Landscapes of Dudley Town Centre Geosites'*, led by Graham Worton. Meet at 6.30pm outside the Old Dudley Museum in St James Road, Dudley, DY1 1AH, (grid ref: SO943903). An evening walk around the town centre to discover the geological and architectural heritage of the town; ample free parking is available after 6.00 on roads around the museum. This is to be followed by a social in a town centre pub after the walk.

6th July (evening field meeting):- 'The *Geology and Landscapes of Barr Beacon Local Nature Reserve Geosite'*, led by Graham Worton. Meet at 7.00pm at the Beacon car park (grid ref: SP060967). An evening walk to examine the geology and its effects on the landscapes of the Barr Beacon area of Walsall. Graham will also explain the recent works and new interpretation installed as part of the 2022 'Purple Horizons Nature recovery project' with Natural England.

4th August (evening field meeting):- *'The Geology, mining heritage and landscapes of Himley Hall and Baggeridge Country Park'*, led by Graham Worton. Meet at 6.30pm at Himley Hall car park, DY3 4LA, (grid ref: SO889915). An evening walk to examine the geology and its effects on the landscape of the historic hall that was also the home to the last deep coal mine of the Black Country (Baggeridge Colliery).

7th September (evening field meeting):- *'The Geology of the Rowley Hills Geosite, Sandwell',* led by Graham Worton. Meet at 6.30pm in the lay-by roadside parking on Darby's Hill Road, B69 1SG, (grid ref: SO967892). This evening walk will take in the views, look at exposures of the famous 'Rowley Ragstone' at the Blue Rock Quarry Geosite, and some millennium Geoart installations.

In Fond Rememberence of Chris King

Due to the pandemic the past couple of years for most of us have been been difficult, isolating, and tinged with some sadness. Many of us will particularly have missed those regular in-person (and 'Zooms' were no substitute) committee meetings, lectures and events at which we exchanged views, conveyed our news and gossiped with colleagues - many of whom we consider friends. Sadly for the geoconservation and geo-education communities those same years have seen all of us bid a remote farewell to too many long cherished colleagues whose convivial company we'd been denied by the constraints imposed, supposedly upon all of us, by Government restrictions and some organisations' guidelines. Hence, the grief at Chris King's passing was somewhat ameliorated by his family being able to bid him farewell at a funeral without restrictions on numbers and likewise acknowledge at a thanksgiving service on 26th March in Wells (where he'd moved from Altrincham 10 years ago) his achievements, as a family man, Christian and academic. It's on this latter role that I must necessarily focus my comments.

Chris completed his undergraduate geology studies at Bristol University before spending five years as a diamond prospector for De Beers; working in South Africa, Swaziland, and Australia he was fortunate enough to find a diamond mine. On leaving De Beers he completed a MSc, with a distinction, in sedimentology at Reading University, teacher training in science and geology education followed at Keele University. He was then offered the post of geology teacher at Altrincham Grammar School for Boys; working there for 19 years, he was eventually its Head of Lower School Science and School Development Officer.

Chris eventually returned to Keele University in 1996 as the Earth science specialist on its science teacher training team. Over some 19 years he was several times its Science Team Leader and served as Head of the Department of Education for two years. He became Director of the Earth Science Education Unit (ESEU), based at Keele, up to his retirement in December 2015. This presented CPD workshops through a national facilitator network to more than 30,000 teachers across the UK. He was made Professor of Earth Science Education at Keele in 2006 and later recognised as Professor Emeritus. He was awarded the Geological Society's 'Distinguished Service Award' in 2003 and the Geologists'

[continued on p.7]

Roland the Rockhound's Erratic Boulder Hunt

Birmingham's Erratic Boulders: Heritage of the Ice Age.

The Heritage Lottery funded erratics project is coordinated by the Hereford & Worcester Earth Heritage Trust, with the Lapworth Museum leading on educational resources, the Black Country Geological Society (BCGS) providing technically qualified volunteers, and the Birmingham Open Spaces Forum providing expertise and knowledgeable local volunteers. It's been making progress in recent months on many fronts, including moving boulders, clearing around them and cleaning them, re-discovering hidden ones, finding 'new' erratics, planning route extensions. In mid-January the project's website [erraticsproject.org], was launched.

Some Erratics on the move

There are several erratics in Woodgate Valley Country Park, but none were easily accessible. Now, it just so happened that the main path network had recently been relaid making this an ideal place to create an accessible and inclusive trail. At the end of December BCC contractors duly moved four erratics to positions alongside the path, while others can be found (un-moved!) just off the path. All the trails will have an explanatory leaflet with a map. The largest boulder *(right)* in its new location (and seen here with the project's manager, Val Turner) is a particularly fine example of Arenig lithic tuff, the dominant erratic rock type in the Birmingham and Bromsgrove area. Also on the move was a smaller boulder in Balaam's Wood, Frankley, from the banks of the River Rea to the footpath on the south bank, and the iconic Cannon Hill Park erratic - simply lifted from its muddy moat and replaced onto a firmer surface.

Clearance Work

Last autumn there was a clearance session to uncover two huge erratics beside the old Northfield-Halesowen railway in Frankley. These are typical, extremely hard, Arenig boulders. However, there are some notable exceptions of erratics which do not conform. One such is a magnificent quartz boulder *(next column, top)* which has long been a closely guarded secret in Broadhidley Woods just south of Woodgate Valley Country Park. Local volunteer, Mike Lambert recently gathered together a team to clear vegetation and clean the boulder. BCGS member and volunteer, Alan Richardson applied the finishing touches with his portable pressure washer, revealing the intricate detail of the boulder; this, in turn raises questions such as about the boulder's origin and when it was transported. Images (before cleaning) were taken by Dr. Andy Jones from the Lapworth Museum, to test its suitability for the construction of a 3D model. It's intended to do fresh imaging now that it has been cleaned. The preliminary 3D digital results can be seen at:

https://sketchfab.com/3d-models/broadhidley-wood-erratic-4db8b35e25cb44799f584fa72c8e702b

Erratic route extension into Dudley

The erratics in and around the Illey Valley (to the south of Halesowen), have not so far been included in the scope of the Project's walking trails. This is about to change! A huge boulder *(right,* nearly 3 x 3m in surface area, recently has been recognised in the Illey Valley, together with other smaller ones. So far a way has not been found to include the Broadhidley Wood boulder into one of the trails. However, a circular extension route from Woodgate Valley to incorporate the huge 'new' erratic and other new finds in the area, with the Broadhidley boulder as the grand finale is in preparation.

Volunteers needed!

Dan Cashmore, unable to continue to fulfil the role of Volunteer Co-ordinator, resigned at the end of December and Zoe Jackson was appointed to the role in mid-January. Consequently recruitment of volunteers is a bit behind schedule, but is now on course. A substantial part of the project lies to the west and northwest of Birmingham, and thus not too far from home for many of the Black Country Geological Society's members.

[this is an edited and condensed version of a recent BCGS Newsletter article by Julie Schroder (the Black Country Geological Society representative on the Erratics Project steering group)]

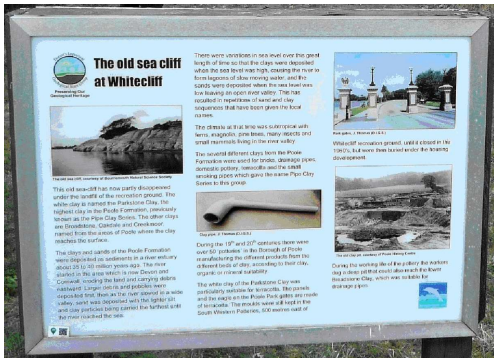
"Much black slate, cut thick, is used here [Leicester] for hearths, chimney pieces &c, looking very black and shining; but the coarser sort, used for tombstones, is very bad for us travellers, as the letters thereon are soon unintelligible." **(Byng, 1954, p.201)**

This Year's Spring Activity

The DIGs group has continued to be active during the spring with a number of conservation sessions which have partly been affected by weather events. We have been to Crookhill Brick Pit (a SSSI but not a DIGS site) to keep access to the rock faces around the old (brick making stopped in the 1960s) clay pit. Its Oxford Clay is a shale with ammonites especially *Kosmoceras*. *Gryphaea* bivalves, and gypsum crystals are also found. Like many similar sites scrub, such as brambles and gorse, can quickly obscure *(left)* the geological interest.

Our conservation activity on the site is limited because it is a nature reserve site with resident Great Crested Newts. However, by clearing gorse and brambles we have kept four exposures *(above)* accessible. Access to the site, as it is fenced off and next to the Weymouth Council Depot, has to be arranged in advance.

Another site much in need of attention was Whitecliff *(below)* at Poole where Palaeogene Poole Formation Parkstone Clay is exposed. The exposure is in a public open space and there is plenty of interest from passers-by when we are carrying out our conservation. Again, brambles and gorse were the main problem. The site has an interpretive panel *(right)*. Further information on the Whitecliff site and others can be found on the DIGS website.



Alan Holiday

Association's 'Halstead Medal' in 2011.

Chris was involved in the organisation of the first International Conference in Geoscience Education in 1993. Later, he was involved in the development of the International Geoscience Organisation (IGEO), becoming its first Chair in 2000. He was Vice-Chair of the International Union of Geological Sciences Commission on Geoscience Education (IUGS-COGE). For many years he was involved in the Earth Science Teachers' Association (ESTA), serving variously as its Chair and Chair of the Secondary Committee. Chris co-edited ESTA's 'Science of the Earth' series; many of the ideas contained therein have since been developed into 'Earthlearningideas', published on the associated website he instigated in 2007. He fully saw the educational value of GCUK's work and it was represented on the Earth Science Education Forum (ESEF).

It was in his role as ESEF's Chair that I met Chris, as the GCUK representative, in the early 2010s. At once his genuine interest in my (and fellow Forum members') work, underlain by his personal warmth and charm, was evident. Somehow, I was eventually 'volunteered' to give a talk or two! ESEF's London meetings were sometimes away from the usual Geological Society venue and Chris clearly enjoyed these *(right)* ones. Initially through ESEF, Chris with his usual enthusiasm drove forward the 'GeoWeek' initiative, which I hope will continue to develop as a tribute to his vision.

In late January, Chris reached out by email to his friends and colleagues with news of his cancer's prognosis. It was very painful to comprehend but his words were typically of thanks and appreciation to others. Replying was a difficult but welcome opportunity to assure him (hopefully never in doubt) and his wife how much his work, and more importantly his personal qualities, were welcomed and very much appreciated; this was very evident from the contributors to the (thankfully live-streamed for those 65+ colleagues unable to attend in person) thanksgiving service.

Chris never really looked his age, perhaps excusing my *faux pas* when he told ESEF colleagues of his impending retirement. I will miss his humour and sparkling smile. I know that I am personally so much the better for our all too brief acquaintance. May his truly Christian soul rest in peace and the care and love of his colleagues and friends support Phoebe and their family in the coming months.

Tom Hose

GeoWeek
Active Geoscience

In the UK some 4000 people graduate every year with geoscience-related degrees. Hence, it seems likely that across the UK there are now around 150,000 or more trained geoscientists, many of whom are probably still working in the discipline. If even just a fraction of these were to become involved in geoscience outreach where they live it would be an exceptional opportunity to raise awareness of geoscience matters across the UK through the public engaging with them. That this wasn't an impossible task had particularly been shown by colleagues in Spain in the mid-2010s; there and then, some 150 geoscientists across the country took nearly 10,000 members of the public on field trips every May. This was the initial thinking and evidence raised by Chris King at an Earth Science Education Forum (ESEF) meeting on, as I recall, on 28th March 2017.

Given the positive experiences elsewhere, ESEF then approached numerous geoscience organisations across the UK to encourage their involvement in a similar initiative. The organisations approached included: the Geologists' Association; the Geological Society of London; Geoconservation; UKUniversity Geoscience UK; the Geographical Association's physical geography group; the Earth Science Teachers' Association; the English and Scottish Geodiversity Forums; the Open University Geological Society; and the British Geological Survey. All of the interested organisations were invited to choose the best name and most suitable dates for a nine-day 'week' in 2018.

Tying the new initiative in with either Earth Science Week (in October) or Science Week (in March) were considered. However many organisations and individuals, particularly academics and school teachers, indicated that October is one of the worst times of the year for such an initiative, especially due to the likely weather; further, March wasn't much better. The, likely better weather of the, summer was preferred by most. Views were sought on a suitable name and all interested parties were asked to 'vote' by completing a brief online questionnaire. Some 137 voted, with more than a third voting for the name 'GeoWeek' - far ahead of any other suggestions.

Further, two of the nine-day potential 'week' choices were also far ahead of the others and about equal in popularity; so the week that didn't coincide with the school holidays was chosen as the most suitable. Somewhat later, the strapline of *'Active geoscience week'* was added and the logo was then designed by the British Geological Survey.

The first GeoWeek, in 2018, ran across the UK from Saturday 5th May to Sunday 13th May. More than 30 different events took place. In 2019, some 76 events were ran across England, Scotland and Northern Ireland. Due to COVID-19 restrictions until 2022 GeoWeek had to be run purely as a online event. Given that the initiative is intended to involve as many geoscientists as possible doing as many activities as can be offered to engage as many members of the public as possible, it's hoped that the number of geoscience-orientated groups around the UK willing to participate will increase to eventually embrace them all. This year, the event will run from 7th-15th May. So, why not get involved? So, do visit the website, and look at what your group can contribute, at: www:geoweek.org.uk. You know it'll be good for getting across the geoconservation message.

Tom Hose

Surveying Our SSSIs

Last February GeoSuffolk surveyed two further SSSIs, for Natural England, both of which were designated for their Coralline Crag exposures. One of these, a delightful locality, was Round Hill Pit SSSI.It's a privately owned site, at the western edge of the outcrop, on the shore of the Alde estuary. It shows an unusual lithology with thin mudstone bands and quantities of trace fossils.

The other was Rockhall Wood SSSI. To do justice to its citation, which includes *"In the study of Pliocene geology this is probably the most important site in Britain"*, we took 50+ photographs. Fortunately, we are familiar with this privately-owned site because GeoSuffolk has done much management here in the past. It is still in very good condition, showing the Coralline Crag stratigraphy right up to its unconformity with the Red Crag. Its north face *(below)* can be viewed, without any need to trespass, from

a public footpath popular with walkers *(seen bottom right in the photo)* which runs past it. The Spring 2022 Suffolk Biodiversity Information Service newsletter has more on *'Surveying our Geological SSSIs'* and can be accessed at:

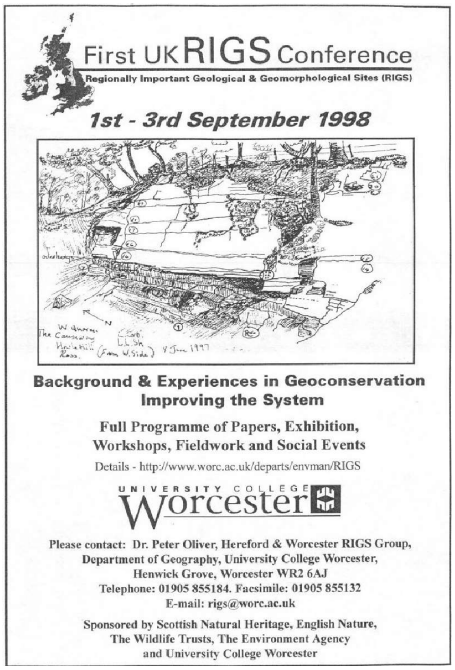
https://newsletters.suffolkbis.org.uk/spring-2022/

Caroline Markham

If your group's not herein represented, do send in your...!

A Key Event Recalled

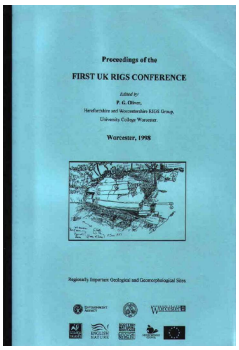
Sometimes it's hard to believe just how long ago some key events, that examined issues still relevant today, took place. Within this category must be the 'First UK RIGS Conference' held 1st-3rd May, 1998. The event



was convened and promoted *(left)* by Peter Oliver, on behalf of the Hereford & Worcester RIGS Group of which he was its Director, with the support of the then University College Worcester. It was attended, over the three days, by more than 100 speakers and delegates. Some 24 invited speakers covered in lectures *(below)* a variety of topics, and some offered optional workshops; a field trip and a tour of Worcester Cathedral were also offered.

An interesting aspect of the conference was the number and variety of poster presentations *(below)*.

These covered the gamut from case studies *(see next column, left)* to then cutting edge research on geoconservation and geotourism *(above)*.



Some of the posters and many of the presentations were edited by Peter Oliver into a proceedings volume *(left)* that can still be read with much profit today. There was a conference photo but I can't find it; I probably was too busy at the time to request my free copy - so if anyone has a (digital file would be fine) copy it would be very welcome. I'm sure it would show quite a few of our present-day members (myself included!) looking somewhat slimmer and without the grey capping!

Meanwhile, there are excellent contemporary accounts of the conference, such as for example, by Mike Horne of the Hull Geological Society [see http://www.hullgeolsoc.co.uk/editorial.htm] and background information in several journal papers and articles, such as in January 1998's *Earth Heritage* (Issue 9); they're a worthwhile read.

Tom Hose

The Devils Quoits – a Historic Monument & LGS in Oxfordshire

Oxfordshire Geology Trust designated the Devil's Quoits as a Local Geological Site (LGS) because it provides an excellent opportunity to examine two different types of Quaternary River Terrace deposits; also, it is easily accessible for individuals and groups. Since its designation many visits have been organised and it provides a good educational site; possibly other groups might have similar examples that are a bit unusual.

This site is close to the village of Stanton Harcourt and adjacent to Dix Pit; from the latter, extensive archaeological finds dating from about 200,000 years ago have been recorded. The site is a henge and stone circle which was damaged by gravel extraction and the construction of a World War 2 airfield. It was restored using some of the original stones and new ones, from their nearby workings at Gill Mill, Ducklington, supplied by Smiths of Bletchingdon.

The original stones are a part of the gravels from the Summertown-Radley Terrace (that is, Terrace 2, dating from around 200,000 years ago). These gravels have

been cemented together with an iron-rich cement. The clasts are mainly local Jurassic limestone but

rounded quartz pebbles, brought from the Midlands by the proto-Thames, are also present - as can readily be seen *(left)* on the surfaces of the re-erected standing stones. The parish church of St Michael's, dating from Norman times, in Stanton Harcourt also uses some of this conglomerate as a decorative course in one of its walls.

The new stones are from Terrace 1 and younger in age; they are less well cemented and so provide a good comparison between the two terrace deposits. They consist mostly of angular, platy clasts of locally derived limestones in a clay matrix. Their loosely cemented iron-rich conglomerate is weathering much more quickly than their Terrace 2 deposit counterpart.

Although it would have been one of the most important standing stone circle sites in Britain, by the end of the 19th century only three of the stones were still standing and surrounded by ploughed fields; a photograph taken in the 1880s shows one of these about 2.5m high.

The site was briefly archaeologically excavated in the 1940s just before the three stones were pulled down to make way for a wartime aerodrome, the runway of which cut straight through the monument. After the war, a large part of the adjacent site was excavated for gravel. Further archaeological excavations were carried out in 1972-3 and then again in 1988 and these showed that once there were more than 30 stones in a 75m diameter circle with a 2m ditch and outer henge bank surrounding them. The stone circle is now thought to be between 4000 and 5000 years old. It is only partly a Scheduled Ancient Monument.

After use as a waste recycling site, the area was restored with the object of allowing public access to the Devil's Quoits for the first time in more than 60 years. Engineering company Wardell Armstrong were asked by Waste Recycling Group to provide advice on the restoration. The task was to rescue any remaining stones and to re-erect them in the locations known from the archaeological record to have contained them. The remaining stones were to be supplemented by new stones of the same geological type obtained from a quarry at nearby Ducklington. The task included assessing safe founding conditions, designing suitable foundations and supervising the lifting and positioning of the stones within the site to methods accepted by English Heritage, working in close liaison with their assigned archaeologist.

The massive henge earthwork was rebuilt in March 2002. Some of the original stones were piled up in November 2003. In October 2005 some of the original stones were moved into position and new stones were erected to replace lost ones. The fully restored monument *(below)* was opened *[and the photo shows, in the foreground, one*

of the original stones] in 2008.

Details of the excavations and many of the other local sites can be found in the following publications: *Excavations at the Devil's Quoits Stanton Harcourt, Oxfordshire. 1972-3 and 1988 Thames Valley Landscapes: the Windrush Valley, Volume 3* by the Oxford Archaeological Unit, Oxford; see: https://eprints.oxfordarchaeology.com/5885/

Please do contact me (lesley.dunlop@northumbria.ac.uk) if you would like further information on the site *Lesley Dunlop*

"The road to the far west is a strange one, full of enchantments and dangers. At the end of the lean Cornish peninsula the land parts like a pair of hungry wolfish jaws, baring its teeth to the Atlantic. The top jaw is the Penwith peninsula. Penwith from its Cornish root 'pen-wydh' means the 'end of the end'. It is a remote frontier facing the primordial fury of Atlantic storms. The sea pounds black granite cliffs. Wind and rain flay the land without pity so shiny knuckles of rock protrude through treeless moor." **(Knight, 2016, p.vii)**

Defra consultation - 'Nature Recovery green paper: protected sites & species'

I am writing to all groups to ask them to look at and respond to the consultation on the Nature Recovery green paper. There are details and a link below and I would urge as many groups as possible to respond so that geodiversity does not get missed from this important piece of work which will shape the future of conservation.

The consultation concerns the 'Nature Recovery green paper: protected sites and species' supporting an ambition to restore nature and halt the decline in species abundance. It sets out a range of options around significant reform of protected sites, species protection, and funding; it also looks at institutional and delivery arrangements that would best support nature recovery objectives.

As you know, our most important geological and geomorphological sites, of national and international significance, are protected as Sites of Special Scientific Interest (SSSIs) through the existing protected sites system. SSSIs which represent the best of our geological heritage are an important resource for local, national and international group field visits for geology and geomorphology; geoscience research potential, sites for geoscience education, and in some cases are 'type' localities for stratigraphy.

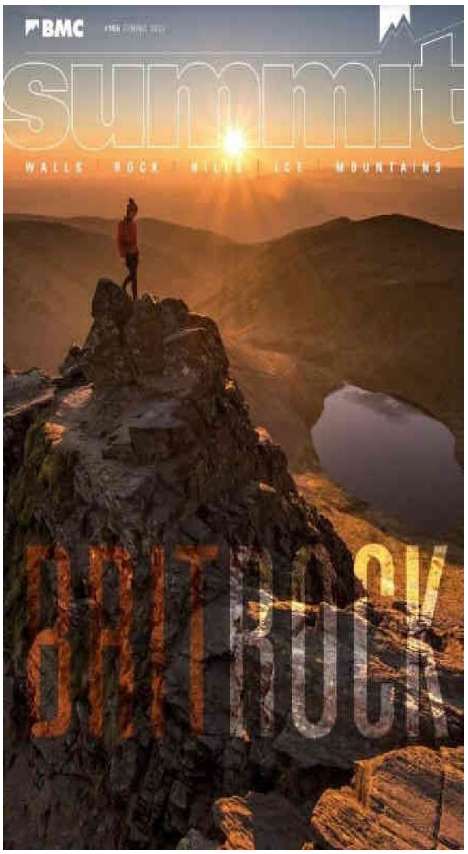
This Green Paper represents a significant moment in the history of nature conservation. It represents significant changes but is focussed on wildlife conservation and does not consider links to geology and geoconservation. It is your opportunity to respond to these proposals, in particular relating to the reform of SSSIs, and provide your views on the future of geological and geomorphological protected sites, their future conservation and management, and the role of geodiversity in our ambitions for nature recovery. The Green Paper consultation can be found at: https://consult.defra.gov.uk/nature-recovery-green-paper/nature recovery-green-paper/

The consultation deadline for submissions is very close as it's 11th May, 2022. Please do ask me (at lesley.dunlop@northumbria.ac.uk) if you have any questions. GCUK, of course, will be sending a response but we do encourage all of our member groups to send in their own too so that it is made clear there is broad national geoconservation interest in this consultation.

Lesley Dunlop (Chair, GCUK)

Sometimes the Timing is...

The title on the front cover of my spring 2022 copy of the member's magazine of the British Mountaineering Councll (BMC) seemed just so topical; at the time I was really looking forward to some fieldwork for a new lowland (mainly for cyclists) geotrail - but alas not in the Lake District (and Blencathra as superbly photographed and copyrighted by Tom McNally) mountains as depicted *(below)*, but one can dream about the future!

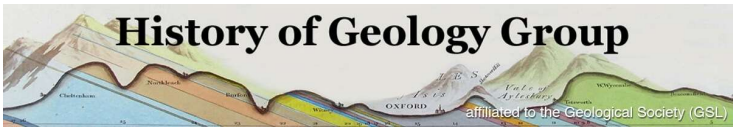


Who knows, I might some day find the geological inspiration and personal energy to research and produce a mountain-biker's geotrail in my old fell-walking and backpacking stomping ground of the Lake District. It was 'A' level geology field-trips to such locations as Shap Fell and Ingleborough that got me into such outdoor activities.

What was also topical about this issue of the magazine was that it opened with a brief conservation message from the BMC's President, Andy Syme, that: *"... Local climbers and hill walkers improving places we use and enjoy is an important part of both retaining access and ensuring we are seen in our actions to be actively working to sustain and improve the outdoor environment... The outdoor environment is increasingly under pressure from what we do, and don't do. I hope that in 2022 we can really step up our work so that we better balance the enjoyment and the impact of climbing and hillwalking for everyone and the planet."* In our geoconservation endeavours we might usefully partner with some of the BMC's affiliated clubs; I suspect that some of their members might even have a background in geology!

Tom Hose

"Stone is something we tend to take for granted. We certthe tones and textures of different rocks when they are displayed in the walls of churches, cathedrals or cottages, and we may travel miles to admire the boulder architecture of a prehistoric tomb or circle. Guide books to castles, stately homes and ancient monuments abound, yet is is very seldom that we are told much, or anything, about the origins of the building materials, how they were obtained, and the stone crafts involved in assembling them." **(Muir, 1986, p.7)**



MEETINGS and CONFERENCES

All HOGG meetings and conferences are held virtually, unless stated otherwise, until further notice; they and other events are offered at a discounted registration fee. Of course, for HOGG members, admission to all online meetings is free.

Associates and guests are welcome to attend meetings for a small admission charge. Registration is via 'Eventbrite' where an outline of each event can be found. An exclusive HOGG members' link for each online meeting is emailed out to members.

2[1st] April (lunchtime lecture) - *'Andrew Crombie Ramsay: insights into mid-19th century geology from his papers archive'* with Anne Barrett, Archivist, Imperial College London;

20[th]-22[nd] May (field meeting) - *'Malvern Rocks: Geology in a Victorian Health Resort'* to be convened in Malvern by Tim Carter;

23[rd] June (lunchtime lecture) - *'Arthur Young and the first geological maps of Norfolk and Suffolk'* with Peter Riches;

15[th]-17[th] July (field meeting) - *'Pioneer geological mapping of Anglesey: The work of John Stevens Henslow, Andrew Crombie Ramsay and Edward Greenly'* to be convened on Anglesey by Prof. Cynthia Burek and Duncan Hawley in association with GeoMôn Geopark;

15[th] September (lunchtime lecture) - *'The Great Bindon Landslip of 1839'* with Richard Edmonds;

22[nd] October (lunchtime lecture) - *'Unlocking Lapworth's Archive'* with Rachel Brown, Project Archivist, Lapworth Museum of Geology, University of Birmingham.

It's worth noting that the HOGG web-page is a good starting point, and has a number of useful links, for anyone interested in following up a history of geology topic: https://www.geolsoc.org.uk/Groups-and-Networks/Specialist-Groups/History-of-Geology-Group/Online-Resources

Globally Significant Geosites

There are currently two projects independently seeking to identify globally significant geosites, that is, specific locations that have played an important role in the evolution of geology.

1. The International Union of Geological Sciences (IUGS) Commission on Geoheritage (IUGS-ICG) aims to announce its first 100 IUGS Global Geosites later this year.

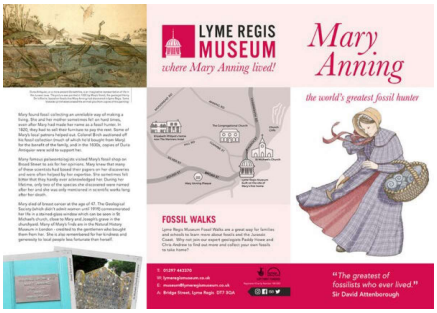
2. The editors of a volume, to be entitled '*Geology's Significant Sites and their Contributions to Geoheritage*', are seeking "examples of significant sites integral to the history of geology". They are particularly seeking sites in Africa, Asia, Australia, South America, and Antarctica, and/or those that feature indigenous voices in their geoheritage. However that doesn't mean that UK sites can't be submitted! Potential contributors should contact Renee Clary (RClary@geosci.msstate.edu)

Statue of Mary Anning to be Unveiled

The commemorative statue of Mary Anning will be officially unveiled in Lyme Regis, by Prof. Alice Roberts, at 3pm on Saturday, 21[st] May. There will be speeches from Mary Anning Rocks patrons - including Tracy Chevalier, Dr Dean Lomax, Dr Anjana Khatwa, Dr Tori Herridge and Prof. Hugh Torrens. The event marks the culmination of a four-year campaign by the 'Mary Anning Rocks' group which was started by schoolgirl Evie Swire (then aged 11) and her mother, Anya Pearson.

The event build-up will be from 2pm onwards, so anyone attending from any distance must be sure to get to Lyme Regis in plenty of time to find car parking and then to make their way to the unveiling site; this is at the junction between Long Entry and Gun Cliff Walk out towards Black Ven, Lyme Regis. Attendance is free, and no tickets are needed, but registration is required to determine numbers; anyone planning to attend should go to the event website at: https://www.eventbrite.co.uk/e/mary-anning-rocks-unveiling-ceremony-tickets-254147972427

It might also be the ideal opportunity to view Mary Anning's grave and her commemorative window *(above right)* at the parish church of St Michael's in the town. An inexpensive booklet *(above left)* about Mary Anning, priced at £1-95, could also be purchased on the day from the Lyme Regis Museum.



Tom Hose

INTERNATIONAL CONFERENCE

September 16[th] to 20[th] 2022 The 47[th] Symposium of The International Commission on the History of Geological Sciences (INHIGEO) will be held in Les Eyzies in SW France. The main scientific themes will be:

- History of Quaternary geology, prehistory and geology of caves;
- History of Miocene geology, since the region includes the Burdigalian and Aquitanian stratotypes;
- Other sessions of the conference will cover all subjects related to the history of geosciences.

Pre- and post-conference field excursions are also planned.
The deadline for expressions of interest has now passed but details should appear on the INHIGEO website in due course: http://www.inhigeo.com/

Copy for the next GEONEWS issue, for Summer 2022, must be with the Editor by 21st July, 2022 at the very latest!

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