



Newsletter No. 267

June 2021

Contents:

Future Programme	2
Other Societies and Events	4
Editorial	5
Black Country Global Geopark Update	5
Hello from another new BCGS member	7
Birmingham's Erratic Boulders - update	7
Matt's Maps No.3 - Stourbridge Old Town	
Gasworks	8
BCGS Poet in Residence, R. M. Francis	12
Mike's Musings No.33: Gigantotomy, Leucippotomy & Staurotomy	12

Committee

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Andrew Harrison

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Alan Clewlow

Hon Secretary

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Andrew Harrison

Meetings Secretary

Keith Elder

Newsletter Editor

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Bob Bucki

To find out more about this image - read on!



Copy date for the
next Newsletter is
Sunday 1 August

<p>Position vacant Honorary Secretary,</p> <p>secretary@bcgs.info</p>	<p>Andy Harrison, Field Secretary,</p> <p>☎ 07973 330706</p> <p>fieldsecretary@bcgs.info</p>	<p>Julie Schroder, Newsletter Editor,</p> <p>42 Billesley Lane, Moseley, Birmingham, B13 9QS.</p> <p>☎ 0121 449 2407</p> <p>newsletter@bcgs.info</p>
<p>For enquiries about field and geoconservation meetings please contact the Field Secretary. To submit items for the Newsletter please contact the Newsletter Editor. For all other business and enquiries please contact the Honorary Secretary. For more information see our website: bcgs.info, YouTube, Twitter: @BCGeoSoc and Facebook.</p>		

Future Programme

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 the current programme of online 'Zoom' meetings.

Visitors are welcome to attend BCGS events.

Up-date on Field and Geoconservation Meetings

Field Trips are back! We're starting close to home with three short evening trips to re-connect with our local geology: **Wren's Nest NNR**, **Saltwells NNR** and **Bumble Hole**. See below for the full details, which are, of course, subject to the current Government guidelines on the pandemic. The meetings should all end 8.45 - 9.00 with a proposed pub stop after that for those who feel comfortable to carry on discussions.

Please note that numbers are limited to 25. First priority will be given to BCGS members.

It is necessary to register for these trips with the Field secretary, Andy Harrison (details above). One week before the event **any remaining places will be available to visitors** on a first come first served basis. Please register your interest as for BCGS members, and you will be put on a waiting list.

There is no news yet on the resumption of the Geoconservation programme.

Wednesday 7 July (Evening Field Meeting): 'Rediscovering Black Country Geology and its Impacts on the Landscape 1: Wren's Nest NNR', led by Graham Worton and Andy Harrison. Meet at 6.45 at the wardens' base (SO937921). Park on the roadside of 'Fossil View'. Starting with our oldest local geology, this will be our first in-person meeting since the pandemic. Finish at 8.45 - 9.00 followed by an optional visit to a local pub to socialise and continue discussions. **Don't forget to register with Andy (details above).**

BCGS Committee – there is still a vacancy for Honorary Secretary!

The Committee meets about 4 times a year to discuss all matters concerning the Society, and particularly to forge together our programme of events. The Society can only thrive with the efforts put in by the Committee behind the scenes, and we are always looking for new ideas. There is **still** a vacancy for the post of Honorary Secretary, and we urgently need someone to fill this post. If you are interested, or would like more information about the work that this entails please don't be shy to put your name forward! Please use the email address secretary@bcgs.info if you are interested.

Wednesday 21 July (Evening Field Meeting): 'Rediscovering Black Country Geology and its Impacts on the Landscape 2: Saltwells NNR', led by Graham Worton and Andy Harrison.

Meet at 6.45 at the main reserve car park (Grid Ref SO933869). At Saltwells we move up the geological column and introduce some Industrial Revolution themes. Finish at 8.45 - 9.00 followed by an optional visit to a local pub to socialise and continue discussions. **Don't forget to register with Andy (details above).**

Wednesday 11 August (Evening Field Meeting): 'Rediscovering Black Country Geology and its Impacts on the Landscape 3: Bumble Hole', led by Graham Worton and Andy Harrison.

Meet at 6.45 at the old 'Dry Dock' pub car park near the visitor centre at Windmill End (SO953880). The final walk in this series explores the landscape and industrial heritage around Bumble Hole. Finish at 8.45 - 9.00 followed by an optional visit to a local pub to socialise and continue discussions. **Don't forget to register with Andy (details above).**

Monday 20 September (Zoom Meeting): 'Geology of Devon & Cornwall'. Speaker: Dr Frank Ince (Russell Society). Dr Ince will be talking about the geology of Devon and Cornwall and the minerals of the China Clay Pits.

Monday 18 October: Speaker and talk details tbc.

Monday 15 November: Speaker and talk details tbc.

Procedures for Field Meetings**Insurance**

The Society provides public liability insurance for field meetings but personal accident cover is the responsibility of the participant. Details can be obtained from the Secretary, and further helpful information can be found in the [Code for Geological Field Work](#) published by the GA and available on our website. Schools and other bodies should arrange their own insurance as a matter of course.

Health and Safety

If you are unsure about the risks involved or your ability to participate safely, you should contact the Field Secretary. Please take note of any risk assessments or safety briefing, and make sure that you have any safety equipment specified. The Society does not provide hard hats for use of members or visitors. It is your responsibility to provide your own safety equipment (eg. hard hats, hi-viz jackets, safety boots and goggles/glasses) and to use these when you feel it is necessary or when a site owner makes it a condition of entry. Hammering is not permitted unless specific permission has been sought and granted. Leaders provide their services on a purely voluntary basis and may not be professionally qualified.

Other Societies and Events

Covid-19 arrangements

Some societies have cancelled their meetings for the foreseeable future. Many are running virtual on-line meetings. Below is a list of the societies whose events we normally promote in this Newsletter. Please check websites for further information.

Woolhope Naturalists' Field Club - Geology Section

Friday 16 July: Prof. Keith Ray and Tim Hoverd will lead a visit to explore Arthur's Stone and other cairns. Full details will be sent out later to those interested. Booking details are below. Register your interest no later than Monday 7 July.

Non-members of the Club pay £2. Visit: <https://www.woolhopeclub.org.uk/meetings> or contact Sue Olver on 01432 761693, email: susanolver@hotmail.com

The Geologists' Association - Geology from your Sofa

The Geologists' Association may not be able to invite you to attend lectures and field trips at the moment, but they are looking at ways for you still to enjoy geology, virtually through online courses, field trips and talks.

See the website for further details: <https://geologistsassociation.org.uk/sofageology/>

Mid Wales Geology Club

Wednesday 21 July: 'The Problem of the Origin of the Caribbean Plate'. Speaker: Dr Keith James.

Further information: Tony Thorp tel. 01686 624820 and 622517 tonydolfor@gmail.com
Web: <http://midwalesgeology.org.uk> lectures start at 7.15 via Zoom.

Abberley & Malvern Hills Geopark - GeoFest

The Abberley and Malvern Hills Geopark Forum are once again running their three-month summer GeoFest from 29 May to 29 August 2021. The GeoFest includes self-led geology and landscape trails and activities all around the Abberley and Malvern Hills Geopark promoting its geology, heritage and wildlife. Further information about the Forum and the 2021 GeoFest can be found on the Abberley & Malvern Hills Geopark website at <http://geopark.org.uk/> The GeoFest programme can be downloaded here: <http://geopark.org.uk/pub/wp-content/uploads/2021/05/GeoFest-Events-2021.pdf>

Warwickshire Geological Conservation Group

Wednesday 16 June: 'Mary Anning, The Fossil Woman'. Speaker and author Tom Sharpe.

WGCG Geology Free Talks: Wednesdays 7.30 via Zoom. For more details visit: <https://www.wgcg.co.uk/> or email: warwickshiregcg@gmail.com

Check websites for the following societies:

Teme Valley Geological Society: <http://www.geo-village.eu/>

East Midlands Geological Society: <http://www.emgs.org.uk/>

Lapworth Lectures: <https://www.birmingham.ac.uk/facilities/lapworth-museum/events/lectures.aspx>

Herefordshire & Worcestershire Earth Heritage Trust: <https://www.earthheritagetrust.org/>

Shropshire Geological Society: <http://www.shropshiregeology.org.uk/SGS/SGSEvents.htm>

Manchester Geological Association: <http://www.mangeolassoc.org.uk/>

North Staffordshire Group of the Geologists' Association: <https://nsgga.org/>

Editorial

The long days of Lockdown and virtual meetings have served to feed our geological appetites with a feast of varied talks for BCGS and for many other societies who have shared their talks widely amongst the geological community. But now, at last, we have our first taste of freedom and the possibility of meeting again. Our three scheduled field visits will be a welcome step forward to a new future, or back to normal - we don't yet know quite what the future holds. Sadly we have to limit the numbers to 25 due to the ongoing social distancing restrictions, but we hope that we'll see most of you during the course of the three trips.

On the Geopark front, we have a welcome up-date in this issue from Graham, giving us an insight into some of the developments which are going on behind the scenes. Particularly exciting is the prospect of a long distance walking and cycling route through the Geopark - and I speculate that this might be another opportunity for BCGS to get involved in testing and proof reading etc.

This brings me to the imminent completion of the long delayed Birmingham Building Stones Trail leaflets. This has been a project close to my heart from its birth in 2016 through years of frequently delayed building work, then Covid-19 to hold things up for yet another year. Several of you have been engaged in the vital work of proof reading and trail testing, with the first draft of the final trail, 'Around the Shops' hot off the press just a few days ago. The originator of this project, Ruth Siddall of UCL has kindly agreed to launch the leaflets with a walk along one of the trails. The date is yet to be decided, but we will keep you posted.

Finally, a reminder that most of our previous on-line talks are on our [YouTube channel](#). Please send the link on to others to spread the word about BCGS as widely as possible! ■

Julie Schroder

Black Country UNESCO Global Geopark Update

It's been a busy few months on the Geopark front as things are moving towards the release from restrictions related to the pandemic. Lots of attractions are opening up again with services adjusted to maintain protection against the virus. Some indoor attractions with small indoor spaces (including Dudley Museum) currently remain closed but should re-open again on 21 June if the current plan for easing restrictions remains in place. The recruitment of dedicated officers for the Geopark is now in its final stages of approval and we will then be able to start building our work capacity. ►



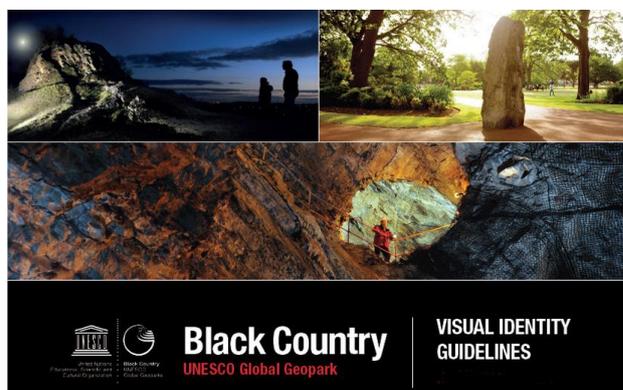
The Covid pandemic continues to impact the global network very hard with no international gatherings possible and no UNESCO inspection visits going on. All our current liaison and collaborative work has been online, which has been quite interesting with global time zone differences meaning that people in different parts of the world have been joining the meetings at what is either very late in the evening (the east Asian Countries like Japan and China), or very early in the morning (far western countries such as those in South America). A major strategic aspect

of this will be to ensure that everyone across the globe is connecting into the UN's Sustainable Development Goals (so called '17 SDGs'), which define a healthier, safer more equitable planet. We are all aligning our activities to support the overall global well-being in our local actions.

There has been steadily growing interest in all aspects of the Geopark from all sorts of groups and individuals, and with the May elections changing some of the political setting, a lot of time has been spent answering enquiries, in video calls and presentations. The next big complex pieces of work include: re-branding our literature, site signs, and the Geopark website. The Geopark joint communications team has now approved the new 'visual identity guidelines'.

Another very complex large project that we are working on is to gather all the information and practicalities necessary to establish a 'Geopark Trail' - a long distance walking and cycling route threading between the Geosites and connecting with the public transport hubs. This is very important in a complicated dense urban area such as the Black Country - and it isn't easy! We are working with planning and design teams involved in the delivery of and waymarking the new Midlands Metro between Wednesbury and Brierley Hill within that context.

We have stepped up the promotion of the Geopark using a wide range of methods: a major social media campaign (particularly Facebook); many presentations to various groups and strategic bodies; publications in a wide range of magazines and journals, including, for example, The Wildlife Trust Magazine, Silurian Times, The International Journal of Geoconservation, and the Insight Magazine for Nefitex/Halliburton companies.



In the background some of the 'heavier' site works requiring chain saws and other machinery have been going on at sites such as Ketley Quarry Geosite in Kingswinford, and in Wolverhampton at Gorsebrook Road Quarry. This is in preparation for the more routine management that can happen later. Essentially these are works to enable these sites to become available for public access again sometime later this year or earlier next year.

Finally, we are looking into the connections that the Geopark can make with the Commonwealth Games and the proposal for a West Midlands National Park... that you might hear a bit more about in a talk from professor Kathryn Moore (Director of the West Midlands National Park Lab) at our indoor meeting in January 2022. ■

Graham Worton

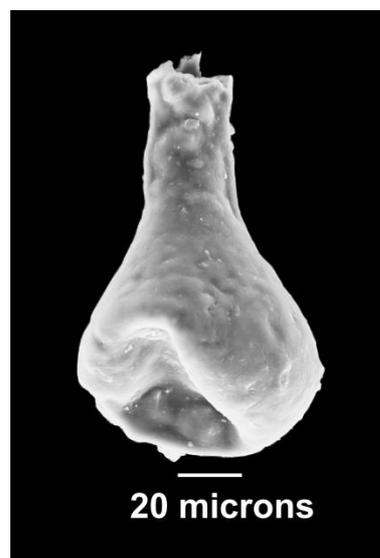
Hello from another new BCGS member

In each BCGS Newsletter since October 2020 we have been pleased to welcome new BCGS members. In this issue we are pleased to introduce James Inman who has sent the profile below. In fact, James is no stranger to BCGS, having given us a talk on the Microfossils of the Wren's Nest way back in 2016. The time is nearly upon us now when we'll be able to meet each other in person rather than as a postage stamp image in Zoom meetings, but for the moment we will continue with this feature, and look forward to welcoming more recruits (and profiles for the Newsletter) in the coming months. Ed.

Profile - James Inman

I had an early interest in geology and palaeontology. As a kid I would go down to the Wren's Nest to collect fossils, along with visiting Dudley Museum. I studied geology at the University of Birmingham and developed a particular interest in stratigraphic correlation. I have been a Geoteam volunteer for a number of years now and have been concentrating on research on Silurian age microfossils from the Wren's Nest. In particular I have an interest in chitinozoans as they can provide an important tool for stratigraphic correlation within the Silurian, as well as scolecodonts. They are quite enigmatic and have been poorly studied within the UK.

The image is of a *Sphaerochitina lycoperdoides*. This one I picked from a bentonite found in the middle of the Nodular Member from the Step Shaft Canal Basin. This species is actually very important as it's short ranged and recognised as a global biozonal species for the Upper Wenlock, so will be important in future correlation with other rocks of similar age in Europe. This is the first time it can be confirmed to be recorded in the UK. The biozonal species can also directly correlate with graptolite biozones, some species often having very similar ranges, so chitinozoans could work as potential graptolite proxies as well. ■



Sphaerochitina lycoperdoides

James Inman

Birmingham's Erratic Boulders: Heritage of the Ice Age Project Up-date

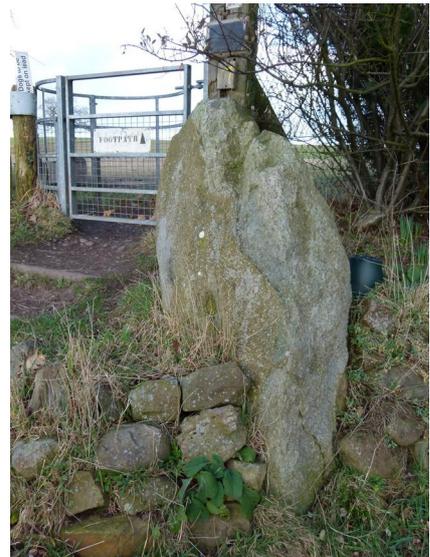
Back in December 2019 I gave an enthusiastic introduction to the Birmingham Erratic Boulders project in which I am representing BCGS on the Steering Group, (Newsletter 258, December 2019, p.8). You may be forgiven for wondering whether this project fell by the wayside during the pandemic, but I'm writing now to assure you that it is still very much alive, and I'm pleased now to be able to bring you a progress report.

My introductory article in 2019 gave a timescale of 2 years for the project, starting in July 2020 subject to receiving funding from the NLHF. Following an encouraging response from the NLHF to the enquiry form, Project Leader Ian Fairchild was almost ready to submit the full application form when the Covid shutters came down and the NLHF was closed to new applications until November 2020 at the earliest. ►

Steering group meetings resumed in November 2020 to face a new set of criteria imposed by the NLHF reflecting the social changes caused by Covid-19. It was decided that we should reduce the time-scale of the project to 15 months, and increase the staff time for project coordination and the management of volunteers. This meant that a new enquiry form had to be submitted, and this was duly sent in March this year. The feedback was encouraging, and the full application was submitted at the beginning of April.

If all goes according to plan, the project will run from July 2021 to September 2022, but at the moment we are still waiting for the NLHF decision.

This project has great potential, perhaps as a starting point to encompass the erratics of the West Midlands, and perhaps to add another dimension to the proposed West Midlands National Park, a project led by Professor Kathryn Moore from Birmingham City University who will be coming to talk to BCGS about the project in January 2022. We're keeping our fingers crossed for a positive outcome from the NLHF application.



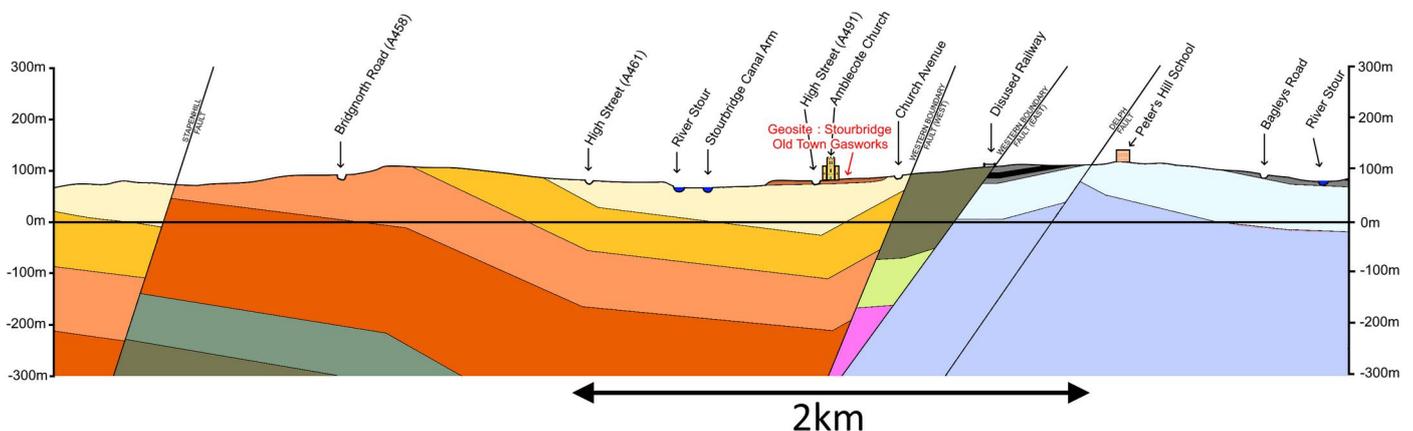
Erratic boulder, Calcot Hill on proposed Erratic Cycle Trail

In the meantime, Ian gave a very informative talk to the West Midlands group of the Geological Society, and you can catch up with this on YouTube here: <https://www.youtube.com/watch?v=NCbbFH-r3k8I> I hope there'll be more to report in the next issue of the Newsletter. ■

Julie Schroder

Matt's Maps No. 3 Stourbridge Old Town Gasworks

Be it the edge of a dual carriageway, nestled amongst residential estates, or right in the centre of a busy town, many of the sights that make up the Black Country UNESCO Geopark don't conform to the traditional expectation of a geological site. In many ways that nonconformity is the beauty of our Geopark. Evidence for Earth's history isn't exclusive to cliffs, mountains or remote rural locations - it exists beneath and around us at all times, even in major urban areas. This particular window in Earth history sits just outside of the Stourbridge ring road. ►



period. Elsewhere the sediment originates from existing rivers and streams. The Smestow, Tame and Stour all define distinctive 'alluvium' deposits. But only at this Geosite, Stourbridge Old Town Gasworks, do we find river deposits predating the most recent ice age - the last interglacial period.

I'll be blunt with you: this Geosite isn't much to look at. If you should venture to the back of the Trefoil Gardens estate during the winter when the vegetation has died back, you will see a tall orange rock face with a slightly darker loose cap of sediment. At ground level we have the Wildmoor Sandstone, which was laid down in a vast desert in the heart of the Pangaeian supercontinent 250 million years ago. Atop the sandstone is our horizon of interest. This is the Stour's ancient river terrace - preserved as it was 100,000 years ago.

These interglacial sands date from a brief warm respite in the otherwise frigid prevailing conditions of the Pleistocene. Because of the Earth's cyclical dance through space, Earth's climate over the last 2 million years has regularly fluctuated between lengthy, frozen 'glacials'; and shorter, warm 'interglacials'. Some of those warm periods, including the most recent interglacial, are of particular interest to researchers such as myself, who seek out potential analogues for how the Earth will look in the near future as a result of anthropogenic warming, and how ecosystems may respond and adapt to those changes.



So what do we know of interglacial Stourbridge? These sands were extensively quarried during the 19th and early 20th centuries and quarry workers often came across animal bones entombed within sediment. Thanks to a 1917 article by a Professor Boulton of the University of Birmingham, this knowledge has survived even though many of the original samples have subsequently been lost.

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| <p>MAMMOTH (<i>Elephas primigenius</i>).
 Portions of Molar Tooth, 7½ by 3½ by 1½ inches.
 " " " 4 by 1½ inches.
 Fragments of tusk.</p> <p>HIPPOTAMUS (<i>H. major</i>).
 Left lower canine.
 Portion of canine, 3½ inches long.
 Portion of enamel.</p> <p>WOOLLY RHINOCEROS (<i>R. Tichorhinus</i>).
 Second right metacarpal.
 Anterior portion of right jugal arch.</p> <p>HORSE (<i>Equus caballus</i>).
 Phalange of third digit.
 Portions of teeth.</p> <p>BISON (<i>B. priscus</i>).
 Distal end of humerus.
 Cervical vertebra and other bones.
 Portion of tusk.</p> <p>BOS, OR LARGE DEER.
 Centrum of dorsal vertebra.
 Portions of teeth.</p> | <p>Hippos, mammoths, bison and woolly rhinos were all amongst the inhabitants of prehistoric Stourbridge. It seems likely that the remains of cold-adapted species listed here were reworked into the interglacial sediment, whilst the warm-adapted species were present through the warmer period. Hippo remains are a particularly exciting find, being exceptionally rare this far north in Europe during the Pleistocene. Apparently they must have migrated up long-extinct rivers that connected Britain and continental Europe at the time. Their presence also exhibits the relative warmth that must have persisted here at least during the summer months. ▶</p> |
|--|---|

Such a menagerie of megafauna seems at odds with what we tend to think of as the 'natural' state of British wildlife, but it's likely that many warm-adapted giants would have reached our shores since the close of the last ice age if it weren't for hunting by ancient humans. The booming population of Homo Sapiens at the close of the last glacial period is almost certainly connected to a simultaneous global decline in megafauna. Apparently our ancestors' appetites were at odds with the reproductive rate of many Pleistocene megafauna, or else we might have hippos in the Stour even today.

This Geosite's name betrays its original purpose. In the 1830s the land adjacent to the site was turned into an enormous gas processing facility. Coal was brought in by canal and later by railway, the site conveniently being at the junction of both, where it would be converted into gas. Enormous gas holdings stored it until needed, at which point it was piped away for both domestic and industrial uses in the local area. Locals might remember a successor gas holding that survived on the site until 2007. Sentimentality was apparently absent when two centuries of gas holding history came to an end, with the Stourbridge News quoting a local resident: "It is wonderful it is going as it cast[s] such a shadow over the area". History failed to record the impression of 19th century Stourbridgians on the completion of the colossal original structure.

During the Second World War, tunnels were dug into the Wildmoor Sandstone to protect workers at the gas works during air raids. It must have been agonizing for those workers nervously waiting in subterranean caverns, illuminated only by candlelight as the sirens blared outside. Had a Luftwaffe bomb struck the gas works, one can't help thinking that a few metres of sandstone would have offered little protection.

All of this from a small, inconspicuous cliff nestled behind a housing estate. Next time you drive south into Stourbridge, cast your mind back to hippos, mammoths and industry that each, in turn, once occupied this site. ■



Matthew Sutton

References and further reading

Bonded warehouse article on gas works:

<https://www.thebondedwarehousestourbridge.co.uk/about-us/our-history/a-symphony-for-the-senses/>

Stourbridge News - Landmark gas holder is axed:

<https://www.stourbridgenews.co.uk/news/1123654.landmark-gas-holder-is-axed/>

Amblecote History Society on the gasworks tunnels:

<http://amblecote.org/History/AHistory/AirRaidShelters/StourbridgeGasWorks.html>

Interglacial fossils paper:

Boulton, W.S., 1917, Mammalian Remains in the Glacial Gravels at Stourbridge. *Birmingham Natural History and Philosophical Society Vol XIV Part II*, pp.107-112.

BCGS Poet in Residence

R.M.Francis

I'd like to share this with BCGS members: a guest blog and poem by Wolverhampton Poet Laureate, Emma Purshouse. I used some of my funds from the University to commission this, with three other guests to follow: <https://rmfrancis.weebly.com/chain-coral-chorus/guest-blog-emma-purshouse>

In other news, I've been asked to do a poetry workshop (similar to the Lapworth one) with the Geologist's Association. It's on 12 June, and you can find details on the GA's website here: <https://geologistsassociation.org.uk/ukfield/>

I've also had one of my poems added to a large public art installation which was erected at West Park Wolverhampton, and will be in the Mander Centre until 15 June. Recently I did a talk for the University's Telford Campus and this is now online here:

https://www.youtube.com/watch?v=vk_IQBG4Kcw&t=867s

Finally, some of you may be interested to sign up for a real, free **Geopoetry Walk on Saturday 19 June**, 11.00-12.00 or 2.00-3.00 in Bantock Park, Wolverhampton. Register here:

<https://www.eventbrite.co.uk/e/r-m-francis-geopoetry-walk-tickets-133134363465> ■

R.M. Francis

Mike's Musings No. 33

Gigantotomy, Leucippotomy & Staurotomy - Part 1

Quite a mouthful of a title! But clearly there's a connecting thread in all those 'otomies'; perhaps 'lobotomy' might offer a clue - or are you already ahead of the game? (an old-fashioned classical education always helps!)

We are clearly (?) concerned with 'cutting' (or more literally 'making incisions'), of a sort. And I have to confess that the geological connection is rather tenuous - stretching a point in order to put to some use many years of visiting particular features on the landscape; features created by the hand of man rather than by Mother Nature - indeed the latter often has the opposite effect of gradually effacing these particular additions to our hillsides if left unattended. Where they do survive to good effect, it is clear that a considerable effort goes in to maintaining a clean condition, with regular scouring, 're-whiting' and trimming of weeds.

So, have you cottoned on yet? Well, it all began in my youth, when I was being brought up with the Chalk Downs of Sussex on the distant horizon. These were always an enticing destination for an airy day's walking, especially on a sunny Summer's day. One such fine day brought me into close proximity of the **Long Man of Wilmington**, one of the better known examples of 'gigantotomy' (that is, carvings on hillsides of giants and similar human forms). ►



The Long Man of Wilmington

But in another sense, it all really began in prehistory with the carving out of that most stylish of **white**



Uffington White Horse - Wikimedia Commons

horses near 'The Manger' at **Uffington**, generally believed to date back as far as the Bronze Age, some time between 1,200 and 800 BC. Some believe this beast might represent some form of dragon, but that seems as fanciful to me as the notion that it dates from c. AD 871, and was cut to commemorate Alfred's accession to the throne of Wessex. Either way, it seems to represent the only truly prehistoric example of what I am talking about, and people sometimes fall into the trap of imagining that all the other examples of '*leucippotomy*' (*carvings of equine form, usually, but not exclusively white, or on Chalk hillsides*), are likewise quite ancient.

In point of fact, the fashion for creating 'hill-figures' really took off in the mid to late 18th century, (co-incidentally when Capability Brown, the first of the great landscape gardeners, was at his height of activity), with just a handful of exceptions known to be in existence from an earlier date. Amongst older examples of this form of landscape modification are the aforementioned **Long Man** and the celebrated **Cerne Abbas Giant**. The former was only first documented in 1710, but thought to date from around the mid C16th, supported both by luminescence dating techniques (OSL - nowadays often applied to geological situations), and by the presence of a particular species of snail only introduced into Britain at this time. The **Cerne Giant** is widely believed to represent a satirical (and slightly naughty!) image of Oliver Cromwell dating from around the 1650s but again only first documented later, in 1694. Both these giants have two things in common. One is a once held (? mistaken) belief that they are much earlier representations of Hercules. The second, rather more obvious similarity, is that both appear on Chalk hillsides.



Cerne Abbas Giant



Whiteleaf Cross - Wikimedia

This latter feature is common to nearly all British hill-figures whatever their age - for the very good reason that this particular stratum affords the most striking background to visibility as well as providing suitably inclined natural surfaces to promote visibility from afar without the need to be airborne (although aerial perspectives are often still the best)!

Further examples of older hill-figures introduce a new category of excavation in the form of simple crosses or '*staurotomy*'. Examples include the **Bledlow** and **Whiteleaf Crosses**, both of which have origins lost in the mists of time, but perhaps originating in Medieval times, and both are located on Chiltern slopes, along with the nearby so-called **Watlington White Mark** which may date from the C16th or C17th. Further simple 'Latin' crosses appear on Chalk hillsides at **Lenham** and **Shoreham** (near Sevenoaks) on the North Downs in Kent, both dating from the 1920's. ▶



The much overgrown Bledlow Cross

Sadly, the **Bledlow Cross** was all but invisible when I visited about ten years ago, demonstrating that without care and attention these figures simply give way to natural regeneration, as has been the case with a cross in Greek style on the South Downs near **Ditchling**, variously said to date from the 13th, 16th or 19th centuries, but renovated in 1924. A clear trace of this can still be discerned on the ground. Such losses are a fate shared long ago with two further examples of *gigantotomy*. Though geographically quite unrelated, both had apparent associations with a legendary British giant **Gogmagog**. The unusual **Wandlebury Enigma** adorned the Gogmagog Hills at Cambridge, where excavations and geophysical trials hint at a complicated and convoluted series of carvings including characters of human form and a horse and chariot, possibly associated with the Roman camp of Vandalsburgh, dating back to AD 277. Better documented are the **Plymouth Giants** on the Hoe, recorded from around 1500, and referred to either as Gogmagog or Gog and Magog.

No doubt far more familiar are the celebrated series of *leucippotomous* (if such a word exists!) **white horses** that are such a feature of the Vale of Pewsey, Wiltshire (the Wessex Downs). The number of such horses seems to vary from one account to another, depending on how far you stretch definitions. It seems that there have been at least 15 such horses over time, but presently only 10 survive if you are prepared to include **Uffington** (actually in Oxfordshire) and that at **Osmington**, which is set firmly in Dorset. This figure is singularly distinguished in bearing a rider representing George III, who was a regular visitor to nearby Weymouth. (*See front cover photo.*) According to one story, he was most offended at being depicted as riding away from the town, and thereafter duly turned his back on the popular resort, never to visit again!

The other 8 extant white horses, which make a splendid day's excursion (by car!) are **Alton Barnes**, **Broad Town**, **Cherhill**, **New Devizes**, **Hackpen Hill**, **Marlborough**, **New Pewsey** and **Westbury**, but some are also known by other names just to confuse. As you may have guessed, the two 'New' ones replace older figures, whilst those formerly on **Ham Hill (Inkpen Horse)**, **Rockley Down**, and **Tan Hill** (a donkey) are further losses to history. These additions to the landscape mostly date from between 1780 and 1845, although the **Westbury Horse** may have had earlier manifestations. They vary in size, often constrained by the nature of the site, with the smallest (**Marlborough and Pewsey**) being mere ponies at around 20 x 15m, while **Westbury** is a veritable stallion, coming in at around 55 x 33m. Apart from mere size, they also come in varying poses, ranging from the rather stiff gait of **Westbury** to the much more stylish trot of the **New Devizes Horse**.



The Cherhill White Horse

In the second part I shall describe the many other, and more varied, examples of Hill Figures, including some painted images and natural phenomena masquerading as such! ■

Mike Allen

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