



Winter 2017

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Newsletter

GCLP workshop at Potton

Sunday October 15th

By Bev Fowlston

BGG held its first public workshop associated with its new **Greensand Country Landscape Partnership (GCLP)** project which promotes awareness and conservation of the Greensand Ridge.

This workshop held at Potton Scout Hut Quarry on 15th October was a free event and open to all. It turned out to be a great success. The workshop included a study of the local sandstone exposure which shows excellent bedding features. Armed with notepads, pencils and measuring tapes the group set about a geological description of the exposure with help from the BGG experts, produced accurate annotated sketches and drew up geological graphic logs.

We had five BGG members volunteering to help on the day: Bev Fowlston, Anne Williams, Tony and Janet Baker and Martin Day. A total of 13 members of the public came along and joined in with this hands-on workshop. We had some lovely comments from the attendees who felt they had learnt a lot.

Two members of the Greensand Country Landscape Partnership also joined us on the day to also learn more about the geology that they are working on; Eloise Markwick, the new Conservation & Project Officer, and Diana Spencer, the Communications & Engagement Officer.



Working on a field sketch



Investigating the exposure



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- * *Walk at Marston Vale*
- * *Fossil talk by Peter Sheldon*
- * *Annual General Meeting*

Sunday September 24th 2017

T *hree events in one afternoon!*

Members met up at the Marston Vale Forest Centre at 2pm for short country walk. This was followed by an excellent fossil talk and finished with the AGM at Marston Moretaine Hall.

The talk given by Peter Sheldon was on '**The Preservation of Fossils**'. Peter is well known for research on evolutionary patterns in the fossil record and the relationship between evolution and environmental change. He is an Honorary Associate in the School of Environment, Earth and Ecosystem Sciences at the OU and given many courses in continuing education for the Oxford and Cambridge Universities.



Peter in action

Peter talked about what a fossil really is and how it is defined. He described various types of

preservation, the importance for fast burial, sediment type and showed us with illustrations the difference between a cast and a mould. His presentation included examples of detailed preservation of insects wings, coloration on shells, microscopic coccolith plates and tiny spores and forams. These are important in the oil industry for correlating sediments and in climate change and forensic research.



What a pooh!

Peter also brought along a massive coprolite (fossil dung) – probably from a large unknown mammal (see photo opposite) and vertebrae from a Plesiosaur and Ichthyosaur which were passed around the group. He also showed us a photo from Bolivia of the giant foot-prints of 2 dinosaurs who must have walked together across the soft mud of a lake before it dried up. This is one of the best and biggest examples of its kind and the longest trace fossil ever found.

Our 12th AGM started at 3.45pm with the usual annual roundup of progress throughout the year followed by reports from the Secretary & other committee members. Anne Williams has agreed to continue as acting Chairman and a new Treasurer has been found to replace Martin Day. We welcomed on board ex accountant Peter Hammond who unfortunately was unable to make the AGM.

Bev Fowlston gave us a GCLP report and a summary of the years events. She also gave a short tribute to John Buxton who died this year. He made a big contribution to BGG site clearances and will be sadly missed. We had mentioned to members that the committee was to review the membership fees and so it was agreed at the AGM to raise the subscription from £7 to £10. This extra funding will help to improve BGG's marketing material, subsidise events, out of county visits and the hire of transport for excursions etc.

Festival of Geology *by Henrietta Flynn*

A great *free* event in London for everyone interested in geology
Saturday November 4th

Each year the Geological Association holds a 2-day event in London to celebrate and promote geology. Aimed at everyone from amateur mineral/fossil collectors, children and academics to educationalists and regional geological groups. This year the festival was held on November 4th – 5th at University College on Gower Street.

Day one was for exhibitors and collectors to show off and sell their displays. Fossils, gemstones, stonecrafts, jewellery, books and maps filled the exhibiting halls. This event is free and included a series of geological talks and tours of the UCL laboratories.



A table of Geo-East

Geo-East took a stand at this event and as BGG is an associate, I helped man the stand accompanied by a very large mammoth tooth which one of my Geo-East colleagues was hoping to sell.

It was a great opportunity to network with other regional groups, some having travelled from as far away as Dorset and Scotland to attend. I left the exhibition hall with a handbag full of earths treasures and headed off to the prestigious Darwin lecture Theatre.



A table of treasures

The lecture programme brought together eminent Professors to talk about 'How to weigh a Dinosaur' (Dr Susannah Marchmont), 'Hot Rocks Under Our Feet' (Prof Chris Jackson), Core! What a Scorcher! (Prof. Lidunka Vocadio) and 'Hot Rocks' (Iain Stewart). The latter lecture by BBC's "rock star" and presenter of many successful Earth Science programmes drew quite a crowd. His lecture on geothermal energy and fracking focussed on the public perception of these activities and the importance of good communication and education.



Hot Rocks man, Iain Stewart

Day two was field trip day requiring a small charge. This year trips were arranged to Riddlesdown Chalk Quarry in Croydon, a building walk around London and a trip to the HS2 route in the Misbourne Valley.

This festival was a wonderful gathering of geological enthusiasts and thoroughly worth the visit. I'll be there again next year. Will you join me?

Greensand Country Landscape Partnership (GCLP) update

Eastern Geotrail

The route for this geotrail has been finalised with extensive work carried out by Tony Baker and Bev Fowlston, the project leader. The flyer text and images are with the funders awaiting approval. We carried out a successful workshop in this Eastern area in October at Potton—see front page.

Meanwhile the general brochure called '**Greensand Country Earth Heritage**' is at first draft stage. Whilst the designers, Countryside, have the text some of the images require better resolution so need replacing. GCLP are also working on the branding which will need approval from all contributing sources.

Central Geotrail

This part of the project will be beginning in earnest in January, when we will begin the route evaluation around Maulden, Ampthill and Flitwick in preparation for the Central Geotrail leaflet.

Assessment for the **Wall of Geology** will be happening mid 2018 but in the meantime, we have begun obtaining materials for the Wall.

Events for GCLP project:

During 2018, we will be planning another workshop event which will focus on Bedfordshire's overall geology and how it relates to Greensand Country. In July 2018 we hope to have an event to mark the Installation of Wall of Geology.

If you want to help in any area of the GCLP project, please contact Bev Fowlston. We are always looking for help with route preparation, photography, brochure writing/design and fundraising.



Supported by
The National Lottery
through the Heritage Lottery Fund



BGG gets TESCO Funding



Some good funding news! We are going into Tesco to get some funding in their 'Bags of help scheme'. Please spread the news to shop at the Tesco stores in your area. (See branches in scheme below).

'Bags of help' is Tesco's local community grant scheme where money raised by the carrier bag charge in their stores is being used to fund thousands of community projects across the UK. Our project title is:

'Earth Heritage of the Greensand Country'.

Three community projects in each local area are voted on by customers in Tesco stores, with projects changing every month. Following the vote, the project that received the most votes in its area will receive a grant of up to £4,000, second place receiving £2,000, and third place up to £1,000.

See below a list of stores taking part in the voting on our project. Please share this list of stores amongst your friends and community.

| | | |
|------|--------------------|----------|
| 5195 | KING ST POTTON EXP | SG19 2QT |
| 6796 | SANDY | SG19 1NX |
| 5449 | SHEFFORD EXPRESS | SG17 5LD |

To check the location of any of the above stores, please go to the tesco website here:
<http://www.tesco.com/store-locator/uk/>

To vote, you will need to make a purchase within store. You will receive one token per transaction (it's not necessary to purchase a carrier bag in order to receive a token), and simply post in the appropriate box.

Thanks to Groundwork UK the administrator of the scheme and in particular to Bev Fowlston for doing all the hard work of getting BGG into the scheme.

Geo-East Conference



'The Ice Age and After in the Eastern Counties'

Geo-East held a very successful conference on Saturday November 18th at Hills Road 6th Form College in Cambridge. Several of our BGG members attended and thoroughly enjoyed the lectures, discussions and topical debates.

This sell out conference (places were filled months before the event) drew nearly 100 delegates from geologists, geomorphologists, archaeologists, engineers and others together in a shared interest of the Ice Age. The conference covered a diverse range of topics including climate change, palaeogeography, Ice Age rivers, early human migration, the Anthropocene and the dramatic opening of the English Channel (dare we call it the first Brexit?). There was also a demonstration of antler tool-making over lunch.

There was a prestigious line up of speakers:

Earth's Climate Evolution: Temperature, Greenhouse Gases, Ice Ages, the Holocene & Anthropocene. *Dr Colin Summerhayes, Scott Polar Research Institute*

The Ice & After in the Eastern Counties: Rivers. *Prof. David Bridgland, Durham University*

Stepping into Britain: the early human occupation of East Anglia. *Prof. Nick Ashton, Senior Curator Palaeolithic Archaeology Dept, British Museum*

How Britain became an island. *Prof. Sanjeev Gupta, Imperial College, London*

The Anthropocene: an overview of geological evidence. *Prof. Colin Waters, University of Leicester*

Several Geo-East regional groups brought posters, books and manned stands to promote their distinct areas. There was also a wide variety of relevant flyers and educational posters given away to delegates with the conference proceedings.

If you would like a copy of the abstracts from the presentations please contact me:
henriettaflynn@btinternet.com

Geo-East is a partnership of organisations and individuals active in promoting and conserving geodiversity in the six counties of the East of England region. We cover Bedfordshire, Cambridgeshire, Essex, Hertfordshire, Norfolk and Suffolk.

BGG is an active member.



Don't forget the Xmas Social
on Wednesday December 6th , 7.30 –9.30 pm, at
the Husbourne Crawley Reading Rooms, Turnpike Rd,
Husbourne Crawley, MK43 OXE

- * *Raffle, and prizes*
- * *Quiz, and picture show*
- * *Party food & drinks*
- * *Display your favourite rock, fossil or have a specimen identified*

Please bring a plate of food (hot or cold, as we have full kitchen facilities available) and a bottle of your favourite tippie . Please also bring along an object of geological interest (rock, fossil, oddity) and don't forget a prize for the raffle.



Crossword answers

How well did you get on with the Bedfordshire Geology crossword in the last newsletter? (Autumn 2017) *Answers in red*

Across

- | | | |
|----|--------------------------------|----------------------|
| 1 | Type of Bedfordshire limestone | Oolitic |
| 2 | Common Jurassic ammonite | Kosmoceras |
| 3 | Great or Little village | Brickhill |
| 4 | Chalk hills | Chilterns |
| 5 | Uncultivated scrubby land | Heath |
| 6 | Safari Park | Woburn |
| 7 | Aqueous plants with longevity | Algae |
| 8 | Fossil for strata dating | Index |
| 9 | Bedfordshire river | Great Ouse |
| 10 | Detrital particle | Silt |
| 11 | Internal mollusc shell | Nacre |
| 12 | Superficial deposit | Head |
| 13 | Layered feature | Bedding |
| 14 | Managed by the Greensand Trust | Rushmere Park |
| 15 | Beds town reflecting geology | Sandy |
| 16 | Poorly sorted glacial deposit | Boulder Clay |

Down

- | | | |
|----|-----------------------------------|------------------------|
| 1 | Calcareous mudstone | Marl |
| 2 | BGG significant project | GCLP |
| 3 | Lower Cretaceous marine clay | Gault |
| 4 | Bathonian carbonate rock | Cornbrash |
| 5 | Calcareous plates of calcite | Coccoliths |
| 6 | Reworked channel, not out | Wash |
| 7 | Upland area across Bedfordshire | Greensand Ridge |
| 8 | Fossil rich sediment, Up Jurassic | Kimmeridge Clay |
| 9 | Marine invertebrate | Brachiopod |
| 10 | Excavated pit | Quarry |
| 11 | Hard to find limestone | Shenley |
| 12 | Mesozoic reptile | Ichthyosaur |
| 13 | Gives sandstone red coloration | Iron |

Bedpop Fun Palaces 2017

'Everyone's an Artist, Everyone's a Scientist'

By Anne Williams

On the weekend of 7 - 8 October there were exciting events all over Bedford on this theme of creativity. The BGG was present at **The Higgins** alongside Sixth Form Scientists with exploding custard powder and a Great Egg Challenge among other activities.



Impressive Higgins exhibits



Geological detective Anne

Crowds of young people and parents came through the Settlement Gallery where we had our Geological Detectives set up with lots of mineral, rock and fossil specimens to handle. And others to identify, with prizes - there was great demand for sharks' teeth.

We were struck by the enthusiasm there is for Geology and an amazing amount of knowledge in some children. And in many parents who brought along their own rocks and fossils to tell us about! So thank you to the organisers

at **The Higgins** and in particular to volunteer Jean Griffith for all her hard work.

Building on the great response we had at the **Bedpop Festival** we did a similar session for younger children later on in October at half term. The theme was 'Trees', which tied in to the exhibition at **The Higgins** and our BGG contribution included a collection of fossil wood, some of it surprisingly heavy! This type of event is definitely worth repeating in the future.

We already have another similar **Bedpop** event in the calendar for 10th March next year, - **Bedpop Science Labs**, based on the theme of Fossil Detectives. More information will be circulated nearer the time so please do come along and join in the fun.

Mobilising the UK geoscience community

The Earth Science Education Forum ESEF (managed by the BGS) is to set up a nationwide education outreach initiative to promote geoscience.

The scheme will be piloted in summer 2018 to introduce the public to a series of GeoCaches in their local area. The initiative is to designate a particular week next summer 2018 for field visits to sites both rural and urban across the whole of the country.

Many local geoscience groups will be approached to join the scheme and help mobilise the geoscience community.

To start the ball rolling we can help ESEF by simply choosing a suitable name for the initiative -

Geoweeek, Geolodays, Geodiversity week, Geoheritage week, Geoloweeek, are just a few names put forward. Can you come up with a better name?

They also need to find a week which suits the majority of participants preferably in May, June or July. So if you'd like to help and take part in the survey please visit:

<https://www.surveymonkey.co.uk/r/SMNXSBS>

For further info on mobilising the geoscience community visit:

www.bgs.ac.uk/esef/home

2018 Events

| | | | | |
|--------|-----------|---|---------|--|
| 6 Dec | Social | Annual Social evening: Celebrate the end of year with us over a few drinks and festive food. There will be a quiz, raffle and a display of our latest promotional material. | 7.30pm | Husbourne Crawley Reading Rooms. MK43 0XE |
| 13 Jan | Visit | Visit to The Higgins Museum and handling collection: Following all the hard work carried out by Anne Williams and Jean Griffith, we will visit the museum and use the handling collection to tell visitors about geology and its influence on Bedfordshire and its related industries. | 2 - 4pm | The Higgins Museum, Castle Road, Bedford MK40 3XD |
| 28 Feb | Visit | Visit to Matthews Brickyard: We will visit the brickyard and see how bricks are made by hand. | 11am | H.G. Matthews The Brick Works, Bellingdon, Chesham, Bucks HP5 2UR |
| 18 Mar | Clearance | Biddenham site clearance: This year we will be cutting back the pathway to the Ice Age gravels at Biddenham pit. | 10.30am | Biddenham Pit SSSI, Fleming Close, Biddenham MK40 4QZ |
| Apr | Walk | Walk along Ivel Valley: This walk will be a figure of 8 circular walk along the Ivel Valley from Biggleswade to Jordan's Mill and then around Biggleswade Common. The walk will begin with a 4-mile loop from Biggleswade to Jordan's Mill, where we can stop for snacks or lunch, then continue with a shorter 2-mile loop around Biggleswade Common. | 10am | Meet at: Dan Albone Memorial car park, Shortmead Street Biggleswade SG18 0BL |
| May | Visit | Visit to Warden Abbey vineyard: We will visit this small vineyard and learn not just about the wine growing of this area but also the geophysical exploration the volunteers have had done. | 2pm | Warden Abbey Vineyard |
| 17 Jun | Visit | Visit Stevington: This visit will take in some of the buildings, including the church around Stevington. | 2pm | Meet at Stevington Church MK43 7QH |
| Jul | GCLP | Install Wall of Geology: As part of the BGG's commitment to the GCLP project we will be helping heritage experts to restore the church wall at Clophill's Old St Mary's Church including building a Wall of Geology interpretation. | 10am | Old St Mary's Church, Old Church Path, Clophill MK45 4BP |
| Aug | Social | Visit to public house: We will meet at the Stone Jug in Clophill. This social event is a chance to catch up with other members for a drink and a chat, even a spot of lunch. | 12.30pm | The Stone Jug, 10 Back St, Clophill, Bedford MK45 4BY |
| Sep | AGM | AGM: A chance to review our year's work and events and catch up with other members. We will also include a walk to Husborne Crawley Church to view the only exposure of Upper Greensand – actual green sandstone! | 2pm | Husborne Crawley Reading Room, Husborne Crawley MK43 0XB |

Please note these events are subject to change so watch out for details by email nearer the day. For further information on any of these events please contact Bev Fowlston, Events Coordinator.

BGG Committee

| | | |
|-------------------------|--------------------|--|
| Acting Chairperson | Anne Williams | annew36@hotmail.com |
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***Wishing all our
members and readers a
very Merry Xmas and a
Happy New Year***



Newsletter compiled and edited by
Henrietta Flynn
If you wish to include an article, photo
or share your geological interest in the
next issue, then please contact me by
email at
henriettaflynn@btinternet.com

Hope you enjoy the read!

*Please keep looking at our website and social media for
news on events, walks and talks.
It's easy to download our flyers and geotrails*

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or Twitter <https://twitter.com/BedfordshireG>*