

www.hertsgeolsoc.ology.org.uk

Since its formation in 1975, the Hertfordshire Geological Society (formerly the Geological Section of the Hertfordshire Natural History Society) has been welcoming both professional geologists and anyone with a general interest in geology and related subjects, including fossils, minerals, rocks and the landscape. Everyone is welcome to join. Children may also attend meetings if they are accompanied by an adult.

The goals of the Society are:

- to develop the knowledge and enjoyment of its members in Earth Sciences
- to be a focal point in the county for all matters relating to its geology

The aims to achieve these goals are:

- Schedule monthly lectures on a broad range of geological or related subjects
- Organise regular field trips both within and outside Hertfordshire
- Maintain and seek opportunities to increase society membership
- Seek opportunities to promote Earth Sciences to a wider audience
- Encourage and assist with geo-conservation and accessibility of SSSIs and RIGS sites in Hertfordshire
- Partner with similar organisations (and when appropriate lobby local and/or national entities) to further public awareness of geology, geomorphology, resource sustainability etc.
- Develop and maintain 2 3 local geological projects which should be initiated as funds permit

Talks programme 2019

Meetings are held on the second Thursday of the month (except February & July this year when it will be on the first Thursday, and August when there will be no meeting) at **Oaklands College**, Hatfield Road, St Albans,

AL4 0JA at 7.30 p.m. HR = Hartoak Room, SR = Sapsed Room.

| Dr. John Smallwood, University College London. HF | | |
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| Early measurements of the density of the Earth | | |
| Dr. Brian Rosen, NHM. | | |
| Arthur Holmes' visionary text book, 'Principles of Physical | SR | |
| Geology', and his prescient model of the Himalaya-Tibet | | |
| region. | | |
| Annual General Meeting followed by a short talk. | | |
| Nikki Edwards. | SR | |
| Chinese Geo-parks. | | |
| Percy Evans Lecture & Presidential Address: Dr Liam | | |
| Gallagher, Network Stratigraphic. | HR | |
| "Little things can make a big difference" – the utility of | | |
| calcareous nannoplankton. | | |
| Sian Evans, Imperial College London. | HR | |
| Salt tectonics on a passive margin. | | |
| Dr Nick Butterfield, University of Cambridge. | | |
| Co-evolution of life and the planet - four billion years of | HR | |
| ecological devastation. | | |
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| | HR | |
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| Saturday John Catt Symposium: Hertfordshire Geology and Landscape, University of Hertfordshire | | |
| University of Hertfordshire | | |
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| | HR | |
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| | | |
| Petroleum exploration in Myanmar: an overview. | HR | |
| David McCann, Senior Project Manager, Phase One, | | |
| HS2 Ltd. | HR | |
| Problems in tunnelling in Chalk and the overlying clays | | |
| through the southern section of the HS2 Chilterns Tunnel. | | |
| Dr. David Norman, University of Cambridge. | HR | |
| Dinosaurs: do we need some relationship counselling? | | |
| | Dr. Brian Rosen, NHM. Arthur Holmes' visionary text book, 'Principles of Physical Geology', and his prescient model of the Himalaya-Tibet region. Annual General Meeting followed by a short talk. Nikki Edwards. Chinese Geo-parks. Percy Evans Lecture & Presidential Address: Dr Liam Gallagher, Network Stratigraphic. "Little things can make a big difference" – the utility of calcareous nannoplankton. Sian Evans, Imperial College London. Salt tectonics on a passive margin. Dr Nick Butterfield, University of Cambridge. Co-evolution of life and the planet - four billion years of ecological devastation. Dr Ian Sims, Director, RSK Environment Ltd & Dr Ian Blanchard, RSK Environment Ltd. Building Stones – title to be confirmed. John Catt Symposium: Hertfordshire Geology and Lands University of Hertfordshire Dr Ian Williamson, BGS retired. Exploring the Palaeocene lava fields of the Hebridean Igneous Province, NW Scotland. Dr. Andy Racey, Racey Geoscience. Petroleum exploration in Myanmar: an overview. David McCann, Senior Project Manager, Phase One, HS2 Ltd. Problems in tunnelling in Chalk and the overlying clays through the southern section of the HS2 Chilterns Tunnel. Dr. David Norman, University of Cambridge. | |

(NB: any last minute changes to the programme will be posted on the website)

Visitors and new members are always welcome.

Visitors will be charged £3.00 per visit up to a maximum of three, to offset the cost of the room hire. This charge will be deduced from the annual subscription rate for anyone taking out membership of the society in the same year. Membership entitles you to free entry to our talks.

Membership of the Society is open to anyone: 2019 Subscription rates

Adult £24.00 per year Family (one household) £32.00 per year O.A.P. £21.00 per year Student £10.00 per year

Please contact us to ask for a membership form or join as a member at one of our monthly meetings: http://www.hertsgeolsoc.ology.org.uk/contacts.htm

Current field trip programme for 2019

| current neta trip programme for 2017 | | | |
|--------------------------------------|-------------------------------|-------------------------|--|
| Saturday 23 th | Working Party Field Trip to | Leader & Organiser: | |
| February | Little Heath, Potten End. | Clive Maton | |
| Saturday | Mundays Hill Quarry, | Leader & Organiser: | |
| (TBC) | Bedfordshire (am) & | Dr. Haydon Bailey | |
| | Tottenhoe, Hertfordshire | re | |
| | (pm) | | |
| Sunday 5 th | Geological treasure hunt: | Leader & Organiser: | |
| May | Standon to Ashwell, with 15 | Mike Howgate | |
| , | stops en-route. | | |
| Saturday 22 nd | Day field trip to | Leader: Organiser: | |
| June | Peterborough, brick pits, | Colin Prosser Nick | |
| | museum and Cathedral tour. | Pierpoint | |
| | (Limited to 20) | | |
| Sunday 14 th | Field trip to complement John | Leader & Organiser: TBC | |
| July | Catt Symposium: TBC. | | |
| Thursday 19th | Field trip to Derbyshire, | Leader: Organiser: | |
| September – | including a visit to Ecton | Dr. Peter Dr. | |
| Sunday | Copper mine. | Gutteridge & Haydon | |
| September 22 nd | | Dr. Haydon Bailey | |
| | | Bailey | |

We also have some local geological trails for you to try out on the website: http://www.hertsgeolsoc.ology.org.uk/walksandguides.htm

2018/9 COMMITTEE

Honorary President: Dr. Liam Gallagher; **Chairman:** Dr Haydon Bailey: 01923 404547; **Vice Chairman:** Adrian Champion: 01442 874897; **Secretary:** Lesley Exton: 07503 153532; **Treasurer:** Margaret Selby: 01438; **Field Secretary:** vacant; **Other members:** Mike Howgate (County Recorder), Nikki Edwards, Clive Maton & Nick Pierpoint.

Geology of Hertfordshire

Hertforshire's main topographic features, such as the Chiltern Hills and Vale of St. Albans, its valley patterns and soil types are all determined by the geological history of the area. These natural features in turn influence the county's varied agriculture and semi-natural habitats and the distribution of its older towns, villages and industries.

The oldest deposits occurring at the land surface are the Gault Clay and Chalk of the Upper Cretaceous (about 100 million years ago). The Gault Clay only occurs in two areas in the northeast, near Tring and Ashwell, but it forms a continuous area of low-lying ground all along the foot of the Chiltern Hills, and occurs at depth beneath southeast Hertfordshire. The main Palaeocene deposit is the Reading Beds, occurring mainly in the southeastern parts of the county near Radlett and Essendon, which consists of multicoloured clays with irregular patches of yellow sands and occasional bands of small black pebbles. Hertfordshire Puddingstone is sometimes found in these beds. London Clay overlies the Reading Beds in south-east Herfordshire and on some of the outliers to the north-west.

Partially covering the solid formations are the superficial sediments, formed in the last 2 million years (Quaternary). These are much more variable in nature and include gravel deposits of the River Thames which once flowed through the Vale of St Albans, clays and gravels deposited by a glacier, claywith-flints and loess deposits. This makes the surface horizons of the soils fertile and very suitable for agriculture as it is easier to cultivate and retains more plant-available water than the underlying gravels or stony clays.

Interested in finding out more?

Hertfordshire Geology and Landscape - John Catt (Editor)

Buy a copy direct from Haydon Bailey (minus postage for £34.00) (See page 3 for contact details) – collect at meeting.

OR order and pay online at www.hnhs.org (£39.00 including postage)

OR send your order and cheque for (£39.00 including postage) to: HNHS, 24 Mandeville Rise, Welwyn Garden City, AL8 7JU