



Down to Earth^{extra}

Issue 166 October 2026

NEWS FLASH...

2027 Trips

- All eight trips can now be booked!

All Autumn Zoom sessions!

- The geology of Oman
- Venezuela tectonics
- In the steps of the pioneers
- The Wednesday Club
- Rocks from the Pressure Cooker

Enrol for all sessions & courses NOW!

What are you waiting for?

No, this isn't a Scottish Tertiary dyke that's somehow escaped your notice. It is a much younger Tertiary dyke (around 9 Ma) which can be found in Northern Iceland, close to Bakkaflot.

The basaltic dyke has weathered to a red colour. It's one of a number in a short stretch of the fast flowing glacial river that's perfect for river rafting!

(Image: Chris Darmon)



From the Editorial team...

As you may have realised from our front cover picture, we have recently returned from leading a tour to Iceland. We had a total of 32 people, including 10 from the USA. With our Icelandic guide Ingi we toured all around the country concentrating on the North and East fjords.

Taking an old fashioned 4-wheel drive coach we were able to go onto some of the smaller dirt roads and even forded a couple of rivers. Importantly we took in some of the more remote and often fascinating geology. We were able to sample places that are visited by lots of tourists as well as places that few people see. As it's three years since we were last in the country it was interesting to see how geological interpretation has evolved.

One thing that was immediately obvious is how clean geological exposures are in Iceland. Unlike in the UK, rocks are not obscured by luxuriant plant growth. Where there are information panels they are in multiple languages, always including English, where the translation is usually first class. It goes without saying that, because this is Iceland, there was no graffiti or deliberate damage to the panels.

Close to Djúpivogur in Eastern Iceland we went to a nationally protected site - something similar to our SSSI designation - in this case a world renowned zeolite locality. It's a beautiful coastal location called Teigarhorn, where there is a horizon that shows these rare minerals as amygdalites in a vesicular basalt.

The site is overseen by a warden who answered our guide's email, inviting us to pay a visit, subject to not collecting or touching any of the material. Once there, we were delighted to see the material, but disappointed by the absence of any information other than a restatement of the statutory protection. I wonder what non-geologists would make of it all? What, they may wonder, was being protected? This was in stark contrast to another site in the area with an excellent explanation of an exposure of Iglimbrite.

Finally, we took a quick look at the largely abandoned town of Grindavík where large photo-boards have been erected outside the swimming pool, which chronicle the recent volcanic events. They tell a very powerful, heart wrenching story, of people and nature.

Chris Darmon & Colin Schofield
The Down to Earth Editorial Team



news update

The Earth's lithosphere was already segmented and mobile 3.5 billion years ago, new study reveals...

As plate tectonic theory has developed over the years, the time when the Earth first became mobile has pushed back further and further. At first we thought it has operated throughout Phanerozoic time (about 550 Ma) then it was recognised in the Lewisian Gneisses of the Outer Hebrides, going back to around 2 Ga. Now a team from Harvard have shown that the crust was mobile and segmented at least 3.5 Ga.

The paper has been published in the journal **Science**. It builds on work that has been ongoing at Harvard and University since 2022 which has been led by **Nadja Drabon**, and more recently by **Alec Brenner**.

The following is from ScienceDaily:

A new study from Harvard geoscientists offers the clearest answer yet. Published on March 19, 2026 in **Science**, the research provides the oldest direct evidence of plate movement, dating back 3.5 billion years. The findings show that early plate motion, even if different from today's system, played a role in shaping the young planet.

"There has been a huge range of ages suggested for timing," said lead author Alec Brenner, who conducted the research in the Department of Earth and Planetary Sciences (EPS) in the Harvard University Kenneth C. Griffin Graduate School of Arts and Sciences. "With this study, we're able to say three and a half billion years ago, we can see plates moving around on the Earth surface."



Earth's surface wasn't always the shifting mosaic we see today—but new evidence suggests it started moving far earlier than scientists once believed. (Image: AI/ScienceDaily.com)

The breakthrough comes from some of the oldest well-preserved rocks on Earth, found in the Pilbara Craton of western Australia. These

Down to Earth extra is designed & published by Geo Supplies Ltd.,
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rocks formed during the Archean Eon, a time when early microbial life existed and the planet experienced frequent impacts from space.

The research team, led by Roger Fu, Professor of Earth and Planetary Sciences at Harvard University, has been studying East Pilbara since 2017. Fu specializes in paleomagnetism, which uses records of Earth's magnetic field preserved in rocks to reconstruct the planet's past. In earlier work, the group also identified signs of an ancient meteor impact at the same site.

Paleomagnetism allows scientists not only to study Earth's magnetic field but also to track how pieces of the crust have moved over time. Tiny magnetic signals locked inside mineral grains act like a record of where the rocks formed on the planet. By analysing these signals, researchers can determine both the orientation and latitude of rocks when they formed, effectively turning them into a kind of ancient GPS.



*Artist's concept of Earth 3.5 billion years ago.
(Image: Taken from Researchgate, original Smithsonian Institution)*

"Almost everything unique about the Earth has something to do with plate tectonics at some level," said Fu. "At some point, the Earth went from something not that special, just another planet in the solar system with similar materials, to something very special. A very strong suspicion is that plate tectonics started Earth down this divergent track."

To investigate, the team studied more than 900 rock samples from over 100 locations in an area known as the North Pole Dome. They drilled cylindrical "cores" from the rocks using specialized equipment, carefully recording each sample's position with tools including a compass and goniometer (a device for measuring angles).

Back in the lab, the cores were sliced into thin sections and analysed with a highly sensitive magnetometer capable of detecting signals far weaker than a compass needle. The samples were gradually heated to temperatures up to 590 degrees Celsius to separate magnetic signals from different periods in their history. The full analysis took about two years.

"We took a really big gamble," said Brenner, now a postdoc at Yale. "Demagnetizing thousands of cores takes years. And boy, did it pay off! These results were beyond our wildest dreams." In magnetic minerals, the alignment of electrons acts like a tiny compass pointing toward Earth's magnetic pole. This alignment also reveals where the rock was located on the planet when it formed, including its latitude.

By examining rocks spanning about 30 million years shortly after 3.5

billion years ago, the researchers found that part of the East Pilbara region shifted in latitude from 53 degrees to 77 degrees -- a drift of tens of centimeters annually over several million years -- and rotated clockwise by more than 90 degrees. (Because the magnetic pole occasionally reverses, it remains uncertain whether this motion occurred in the northern or southern hemisphere.) After roughly 10 million years, the movement slowed and eventually stabilized.

For comparison, the team looked at rocks from the Barberton Greenstone Belt in South Africa. Earlier studies showed that this region stayed near the equator and remained mostly stationary during the same period. This suggests different parts of Earth's crust were moving in distinct ways.

Today, tectonic plates still move, though slowly. For example, the North American and Eurasian plates are separating at about 2.5 cm. per year.

Scientists are still trying to determine exactly when and how Earth developed its modern system of plate tectonics, known as an "active lid." Some theories propose that early Earth had a "stagnant lid" (a single unbroken global plate), a "sluggish lid" (slowly moving plates), or "episodic lid" (plates moving sporadically).

This study rules out the stagnant lid idea, showing that Earth's surface was already divided into moving pieces. However, it does not yet distinguish which type of early plate behaviour was dominant. Further research is underway to resolve this question.

"We're seeing motion of tectonic plates, which requires that there were boundaries between those plates and that the lithosphere wasn't some big, unbroken shell across the globe, as a lot of people have argued before," said Brenner. "Instead, it was segmented into different pieces that could move with respect to each other."

The researchers also identified the oldest known geomagnetic reversal, a process in which Earth's magnetic field flips so that a compass would point south instead of north. This flipping is thought to be driven by the "dynamo action" of molten iron circulating in Earth's core, which generates electrical currents and magnetic fields. The most recent reversal occurred about 780,000 years ago.

According to Fu, the new findings suggest that such reversals happened less often 3.5 billion years ago than they do today. "It's not by itself conclusive, but it suggests that maybe the dynamo was in a slightly different regime than today," he said.

Materials provided by Harvard University. Original written by Kermit Pattison.

Editor's note: Previous work on this subject has been carried out using the dating power of Zircons, but this only provided indirect evidence for crustal movement. Crucially, the dates seem to coincide with those stated in this latest research.

Never again will East Anglia be a 'geological desert' as new supervolcano is found...

Years ago, a good friend of mine who hailed from Norwich described East Anglia as 'mamba country' which she explained was interpreted as 'miles and miles of b****r all'. Having run several geological trips to North Norfolk to study the superb Quaternary cliffs I can testify that isn't actually the case, but ancient geology it has very little, until now!

Research carried out by scientists from British Geological Survey (BGS) has revealed a remarkable volcanic history that is re-writing part of the history of the UK.

This is from BGS:

The origin of the Kinnekulle tephra, a huge volcanic ash layer spread across Norway, Sweden, the Baltic region, Belarus and Poland, has long been a mystery but new evidence may have uncovered the source of the ash for the first time.

Scientists at the British Geological Survey (BGS) and the University of Oslo have studied tiny crystals, smaller than the diameter of a human hair, extracted from boreholes 65 km apart in Lincolnshire and Norfolk. The analysis uncovered evidence of a 454 million year old supervolcano, now concealed beneath The Wash on the east coast of England.



Tranquil fields at North Creake, Norfolk give away nothing that points to a violent past.

(Image: Tim Pharaoh, BGS/UKRI)

The location of one of the borehole samples studied, was at North Creake in Norfolk. There is no evidence in the present day landscape of the former supervolcano concealed deep below. However 454.45 million years ago several hundred to a thousand cubic kilometres of the Earth's crust were thrown into the stratosphere by eruptions with a force equivalent to several thousand H-bombs, one of the largest eruptions in recorded Earth history.

Volcanic rocks of comparable age comprise the rugged topography of Eryri (Snowdonia) and the Lake District. This belt of arc volcanism extended from the Lake District towards Belgium in late Ordovician times, when England was separated from Scandinavia by an oceanic basin. The geography was probably comparable to the West Pacific region (Korea–Japan–Indonesia) today.

Using cutting-edge analytical techniques at BGS's laboratories, scientists have been able to examine zircon crystals, which form within molten magma before a volcano erupts. Over time, uranium within the zircon slowly decays into lead isotopes, analysis of which enables the age of eruption to be precisely determined. The research reveals that the zircon crystals at both sites were formed at approximately the same time, about 454.4 million years ago. Researchers at the University of Oslo had previously obtained an almost identical age for the Kinnekulle tephra in the Oslo region.

in an embankment of the railway line north of Oslo, close to Sinsen station. Dipping strata of the Arnestad Formation (Sandbian Stage,

Late Ordovician), can be seen. It comprise light grey coloured shales containing thin beds of grey-green altered volcanic ash (tephra) likely erupted from the 'Wash Supervolcano'. The Kinnekulle tephra, here about 130 cm thick, lying close to the smaller snow patch, represents the 'fall-out' from an Ultra-plinian volcanic eruption in eastern England 454.45 million years ago.



Ordovician ash from the East Anglian supervolcano at the side of the railway near Oslo.

(Image: Tim Pharaoh, BGS/UKRI)

The scientists believe that the near-identical ages suggest that ash from the eruption plume in what is now eastern England was blown across the Tornquist Sea, which separated England and Scandinavia, and settled on the sea floor of ancient Scandinavia. Further support for this hypothesis is provided by chemical analysis of apatite crystals in both the proposed source and the tephra. During the highly explosive 'super-Plinian'-type eruption, hundreds of cubic kilometres of rock were launched into the stratosphere by the force of the blast. One of the samples also contained younger zircon grains, dated to 453.70 million years, reflecting a further eruption associated with the collapse of the volcanic caldera.

Tim Pharaoh, BGS, principal author of the paper said: "More than 454 million years ago, a supervolcano now hidden beneath some of England's flattest landscapes, produced some of the biggest eruptions in recorded Earth's history. We believe that, thanks to cutting edge analysis, we have been able to provide evidence that the source of the ash layer in Scandinavia originated from this supervolcano, reshaping our understanding of England's deep geological past."

The research paper, 'The Wash Igneous Complex of eastern England: a candidate Avalonian source for Sandbian tephra in Baltoscandia and implications for closure of the Tornquist Sea', is now available to read.

The analytical work for the the supervolcano project was funded by The National Environmental Isotope Facility (NEIF) is an integrated analytical platform funded by the Natural Environment Research Council (NERC), part of UK Research and Innovation (UKRI).

Pioneering Welsh fossil hunter and collector gets a blue plaque on her home...

If you think of female fossil hunters and collectors, the name of Mary Anning comes immediately to mind, but after that I guess that many people would resort to scratching their heads. I'd certainly not heard of Dorothea Bate who died in 1951 aged 72 years.

Dorothea was born in Carmarthen, Wales, in 1878 and developed a fascination for the natural world, including shells and fossils, from an early age.



Dorothea Bate in Malta in 1934 during her work for the The Natural History Museum in London.

(Image: Ghar Dalam Museum and Heritage Malta/BBC)

As a young woman, she moved with her family to rural Gloucestershire, where she continued to spend many hours exploring the surrounding countryside and caves, collecting fossils. She had little formal education, instead largely teaching herself.

Given her background and lack of a formal education in the subject, it's amazing that in 1900 she sought work at The Natural History Museum in London. But her determination impressed museum staff, earning her a position as a behind the scenes assistant and beginning an association with the institution that would last more than 50 years.

Her first scientific paper, "A Short Account Of A Bone Cave In The Carboniferous Limestone Of The Wye Valley", was published in 1901. During her career, she went on to undertake expeditions across the Mediterranean, often travelling alone to remote caves in search of evidence of ancient life. In Cyprus, she discovered a previously unknown species of dwarf elephant and in 1909, while in the Balearics, she discovered the myotragus - an extinct goat-like iantelope.

In total, she achieved more than 80 published scientific papers, despite spending most of her career without a permanent paid position, surely something that a man would not have had to endure.

Her work was first recognised in 2017 with the awarding of Blue

Plaque at her birthplace, Napier House in Carmarthen. This year her work as officer-in-charge of the Natural History Museum, in Tring, Hertfordshire, from 1948-1951 has been recognised by Historic England with another coveted Blue Plaque.



The first Blue Plaque on her birthplace in Carmarthen.

(Image: nation.cymru)

In a joint statement, at the unveiling of the latest Blue Plaque co-CEOs of Historic England Claudia Kenyatta and Emma Squire said that Bate's "life was defined by her intense curiosity and desire to understand the natural world. She used this drive to make sense of ancient life through fragments of bone, bringing it to life once again."



The Blue Plaque at Tring Natural History Museum

(Image: Courtesy of Facebook)



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Extra October 2026

"Her research transformed our understanding of prehistoric animals and ancient environments. Not only does her work continue to be invaluable in the field that she helped to establish, but as one of the first women to be employed by the Natural History Museum she was instrumental in paving the way for future women in science. This plaque ensures that her pioneering contributions to science receives the wider recognition it deserves."

Heritage minister Baroness Twycross said Bate's achievements "helped break through the glass ceiling and paved the way for women in palaeontology".

Dr Sandra Knapp, director of research at the Natural History Museum, said: "The role of women scientists in natural history is often hidden, but Dorothea Bate's work with fossil mammals was both innovative and set a path for others, despite obstacles. The installation of this plaque not only honours her but also serves as a reminder that women have been, and continue to be, key contributors to our understanding of the natural world."

This item is largely based on material from BBC Wales, with thanks.

Teigarhorn, East Iceland, we found the explanatory board...



In the Editorial for this issue we mentioned that we'd recently visited a nationally protected site at Teigarhorn in Eastern Iceland that displayed superb Zeolites. We were amazed that there was no information available about the Zeolites.

However during an internet search this has now turned up! It's either now inside a building which was closed, or it's no longer there, but we thought that we would bring it to you and share the information.

This comes from the website 'Read the Plaque'...

"Teigarhorn is a world-famous site for zeolites. They are first mentioned in connection with Berufjörður in the 18th century. There, as in many other places, zeolites are found in hollows and crevices in the rock, coming to light as a result of erosion, particularly when wave



This is our group on the beach at the beautiful coastal site that is Teigarhorn. Not all Icelandic days are this good! (Image: Chris Darmon)

action breaks rock out of cliff faces. In many places, these cavity fillings are found in clay-like material and are easily destroyed. They are often covered with an external layer of blue-green celadonite. In geological terms, the zeolite formations at Teigarhorn are connected to dykes extending from the main volcano that was active in Álftafjörður more than 10 million years ago. Teigarhorn is best known for the types scolecite, stilite, heulandite, and mordenite, along with epistilbite, which was first identified in samples from there. Local merchants and others used to collect rocks indiscriminately here and sell samples around the world. In 1976m the Environment Agency, in consultation with the landowners, declared Teigarhorn a natural monument."

An unusual present idea - limited edition...

'The Cream of the Crop 2025'

As part of their work for Geo Supplies, your editorial team, Chris Darmon and Colin Schofield go to some very interesting places around the British Isles. Whilst they are in these places they often pick up rock specimens, most of which go to students and institutions both here and even around the world. However there are also some rare or unusual rocks that don't form part of our regular stock and it is these that we've gathered together into a limited edition collection that we are offering as our 'Cream of the Crop 2025'.

The set comprises 14 carefully chosen specimens from the British Isles: with: graptolitic shale (Llandrindod Wells), Stanner Rock metaigneous (the oldest in Wales), Old Red Sandstone (Goodrington), Hematite (Cumbria), Folly Sandstone (Silurian), Phyllite (Arran), Newmead Sandstone (Builth Wells), Man-o-War Gneiss (Cornwall), Quartz Porphyry (Cornwall), Honister Slate (Cumbria), Hybrid Rock (Arran), Tonalite (Ardnamurchan), Pitchstone (Arran), Felsite (Loch Ba, Mull). Each set comes boxed with notes and costs £54.95 including postage. The set is available NOW for immediate shipping!

Purchase online at: geosupplies.co.uk or ring us on: 0114 245 5746.

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Available!**

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Great geo-adventures in 2027 begin here...



How's this for stunning view of British Camp on the top of the Malvern Hills? Come and enjoy more of the same on our visit to Great Malvern in July.
(Image: Courtesy of Visit the Malverns)

All of our programme of eight trips for 2027 are now available for you to book. Several are close to being fully booked already.

We begin with a visit to Furness in the South Lakes of Cumbria and then the Magma Geopark in Norway. In the Spring and Summer we go to Strathpeffer, Eastbourne and Great Malvern with our Summer School at the University of Warwick. Moving to the Autumn we've got a week based in Oban followed by a visit to Whitby.

To view a brochure, go to our website at:
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Remember that booking forms are only available direct from us:
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Residential Field trip programme 2027...

- Furness & South Lakes, April 16-23
- Magma Geopark, Norway, May 4-13
- Strathpeffer & Cromarty, May 21-29
- Sussex Coast & South Downs, June 20-26
- Abberley & Malvern Hills, July 18-23
- Summer School University of Warwick July 31-August 7
- Oban & the Hebridean Isles, Scotland, September 30-October 8
- Whitby, Yorkshire Coast, October 17-23

Early booking is advised, especially if you are looking for a single room.

Several trips are nearly full.

Search online at www.geosupplies.co.uk or ring us on 0114 245 5746
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If you haven't joined one of our residential field trips before, what can you expect?

- *Our residential field trips are suitable for adults of all levels of interest and geological knowledge.*
- *Our trips are friendly and informal and usually comprise 15-20 people. Overseas trips are usually larger.*
- *We usually make use of comfortable small hotels and guest houses and all meals are included.*
- *You have the services of Chris Darmon and Colin Schofield as field leaders. Both are highly experienced and knowledgeable field geologists.*
- *For some trips we have a hired minibus but on other trips we will use shared cars, or even public transport.*
- *Dates shown in this listing are the start and finish dates.*
- *Where prices are quoted, they are per person in a shared twin/double room.*

If you still have any questions or queries, don't hesitate to email us at: downtoearth@geosupplies.co.uk or tel: 0114 245 5746

Before you book on one of our trips...

We are always pleased to welcome new people along on our trips. So if you are thinking about it, what do you need to know before you 'take the plunge'?

Who are the trips aimed at?

The short answer is that they are not aimed at any particular group of people. Our participants are mainly older retired people who want to keep their minds and bodies active, but younger people are welcome.

Some people have lots of geological field experience whilst others are complete beginners. As one person put it to us "I've forgotten all I once knew and need to come along to hear it again." Our UK trips are all small groups of 15 to 20 people maximum so we can make lots of what we say personal to you.

In recent years we've run several special trips for American geologists and now some of them join us on our regular trips, adding greatly to the character of our field experiences.

Will I be able to manage the walking?

We always try to keep walking to a minimum, but, almost by definition, some walking will be involved. If you can't manage a particular walk, just tell us and it will never be a problem for you not to do it. We have one person who really enjoys sketching - she's done some amazing sketches while the rest of us visit a quarry!

How do we get about on trips?

It varies a lot from trip to trip. Sometimes we hire a minibus, on other occasions we use public transport and at other times we'll make use of shared cars. Look at the details for each trip to find out.

What about accommodation?

We always try to use hotels or guest houses that have ensuite rooms as

standard. Most of our accommodation will provide breakfast and evening meals, but sometimes we eat in local restaurants. We include the cost of all food, including a packed lunch for each field day.

We prefer to use small family run hotels and guest houses but they are getting harder to find, so sometimes we use larger hotels such as hotels in the Leisureplex and Strathmore group. Once again, see the individual trip brochures for details.

Are your bookings safe with us?

Yes indeed they are! We've been in the business of running trips a long time and ensure that all the money you pay us is safe in a client trust account until your trip is completed.

But, above all, our trips are educational informative and FUN! We don't take ourselves or our geology too seriously. After all you are on holiday - and you are paying for it! We look forward to welcoming you on a trip sometime soon.

The full list of field trips for 2027...

We are now looking forward to another great season of field trips in 2027. As we are hosting two groups of Americans during the year, it means that the number of trips for general sale will be somewhat reduced. All the more reason to get your bookings in early!

Despite running these trips for a number of years, we've managed to find some great new venues for 2027 and, as a result, have more than 100 confirmed bookings, even at this stage.

Why not contact us now for a booking form:

downtoearth@geosupplies.co.uk or ring us on: 0114 245 5746

You can view brochures for all the trips featured here (apart from the 2027 Summer School) on our website at:

www.geosupplies.co.uk

Furness & the South Lakes. April 16-23 (7-nights) £1295

The Lake District is arguably our premier National Park and it's an area that many of you will have visited. But how many of you know or have ever visited the South Lakes, known as the Furness area? It's an area of scenic coastline with small coastal communities like Grange over Sands and Arnside. From our base in Grange we'll be able to explore a wide area taking in places such as Ravenglass, St Bees, Arnside, Lake Windermere and quarries around Millom.



The Cumbria Grand Hotel is in the tranquil resort of Grange over Sands - our base for the week

Welcome to our exciting world!



All this from the comfort of the Cumbria Grand Hotel in Grange over Sands. Take advantage of this excellent value package, just as the spring flowers come out!

Sorry, single rooms for this trip have now sold out!

Norway - Magma Geopark, May 413 (9-nights) £2595

We have been to Norway on two previous occasions to the Gea Norvegica Geopark where we saw great geology and landscape. This time we are staying in the south of the country but venturing to the Stavanger area which is the location of the fabulous Magma Geopark.

The tour commences with the first night in Oslo where we will be staying in an historic hotel which is actually within the main railway station. From there, we'll take a 7-hour train journey direct to the small town of Egersund, our base for the entire week. Each day we'll venture out into the geopark with their own geologist. You'll see some amazing ancient rocks including anorthosite, that's much more common on the surface of the moon! There will be visits to former metal mines, a guided tour of a local quarry, as well as walks in the fjord landscape, a boat trip to a local island and much more!



Some of the rocks in the geopark include anorthosite, which is more commonly found on the moon. (Image: Magma Geopark)

There will be visits to former metal mines, a guided tour of a local quarry, as well as walks in the fjord landscape, a boat trip to a local island and much more!

The last couple of places on this trip available to book NOW!

Strathpeffer & Cromarty, May 21-29 £1695



The Ben Wyvis Hotel our base for the week.

Another new location - not far from Inverness but so very different. The spa town of Strathpeffer was a Victorian favourite for 'taking the waters', But today our hotel has all mod cons and there's no cold baths! It's a great starting point from which to explore the local area which has much to offer the geologist.

From the local Devonian rocks of Cromarty birthplace of Scottish geologist Hugh Miller to the metamorphics of the local Moine rocks. We'll take in a train trip to Kyle of Lochalsh as well as another to Golspie on the coast to see the Jurassic and Triassic. We also see some of the younger sedimentary rocks around Lossiemouth to the east of Inverness.

This is a great new location that gives us some super days out! We can still accommodate people in double or twin rooms only.

Sussex Coast & South Downs, June 20-26 (6-nights) £1095

Based at the Queen's Hotel in the resort of Eastbourne this is a trip that will take in some of the classic chalk cliffs in places like Beachy Head and also some of the Lower Cretaceous rocks in places like Hastings, not forgetting the beautiful landscape of the South Downs National Park.



The Queens Hotel on Eastbourne's seafront

If you've never sampled some of our finest Chalk landscape then do so now! you won't regret it we can assure you. This is English landscape at its very best.

Single, double and twin rooms are still available for this trip.

The Abberley & Malvern Hills Geopark, July 18-23 (5-nights) £1195

Your Editor has had the pleasure of being the President of the Abberley & Malvern Hills Geopark for the past five years and along with the geopark volunteers, knows the area well.

Based at the Abbey Hotel in Great Malvern, this trip will take you to places where you can enjoy rocks and fossils from many different periods. We go back to the Ediacaran of the Precambrian to see the hard igneous rocks of the Malvern Hills, right on our doorstep. During the Cambrian and Silurian periods we see fossiliferous sediments. The Devonian and Carboniferous see are very different sandstones and even coal seams in the Wyre Forest and around Highley in the Severn Valley. Around Bridgnorth we see the bright red Permian sandstones from a desert environment.



***Fabulous Precambrian rocks and an unconformity at Gullet Quarry.
(Image: Abberley & Malvern Hills Geopark)***

Come and enjoy geology and landscape at its very best! This trip is suitable for all, including those who are new to field geology.

There are still vacancies on this trip, including singles.

Why come and join our Summer School?

Our Summer School is modelled on those that used to be run by the Open University a number of years ago. All are based on a campus of one sort or another where we can sleep in largely single, en-suite study bedrooms and enjoy on site meals. They are also more than just field trips with dedicated transport each day. There's an evening programme of talks from local experts and also social events. In short - something for everybody, including those with limited mobility!

Summer School at the University of Warwick £1695 July 31-August 7 (7-nights)

Our popular Summer School moves to a new location and you cannot get much more central than the University of Warwick, set in countryside on the southern edge of Coventry.



***Beacon Hill, Charnwood Forest Geopark
(Image: BGS)***

This location will allow us access to the rich and varied geology of north Warwickshire around Nuneaton, Charnwood Forest in Leicestershire, the Black Country Geopark and the Jurassic rocks of the local area and also the Cotswolds. In short, something for everybody, from the Precambrian to the Quaternary!

The brochure for this trip is now available on our website.

Remember that most of the rooms are singles, so take advantage and make that booking!

Oban & the Hebridean Isles, September 30-October 9 (8-nights) £1495

Yes, we've found a hotel base in Oban! Now that we can tick that box, we can bring you an action packed week of trips around the surrounding area. With luck we'll get you to the islands of Kerrera, Lismore, Mull, Iona, Luing and Easdale. We'll also take in some of the geology of the mainland, around the Falls of Cruachan, Crianlarich and Tyndrum. You'll see fabulous Scottish geology from the Lewisian through to the Tertiary volcanics with much in between.



The Royal Hotel is on Oban's seafront and is close to the harbour and railway station.

Enjoy the comforts of the 3-star Royal Hotel in Oban where we offer ensuite rooms and all main meals.

Last couple of places available on this trip. Sorry no more singles.

Whitby on the Yorkshire Coast, October 17-23 (6-nights) £1195

Whitby is the jewel in the crown of the Yorkshire Coast and is truly an all year round resort. We are lucky to have secured a slot in the prestigious Royal Hotel that sits atop the nineteenth century splendour of the West Cliff.



The Royal Hotel sits atop the West Cliff.

With so much geology right on the doorstep we won't be spending hours getting to our field locations. Almost all of the solid geology was formed during the Jurassic period and much of it is very fossiliferous containing everything from humble brachiopods and bivalves through to ammonites and the remains of giant sea reptiles. During this trip we will take in the geology of Whitby and local places including Robin Hood's Bay, Staithes, Grosmont and Sandsend. We'll use the local buses and also the train to get inland.

As it has been some time since we last visited Whitby, we expect this trip to fill up rapidly, so you are strongly advised to make your booking soon. Currently we can still accommodate people in twin and double rooms available.

Welcome to our live Zoom world!

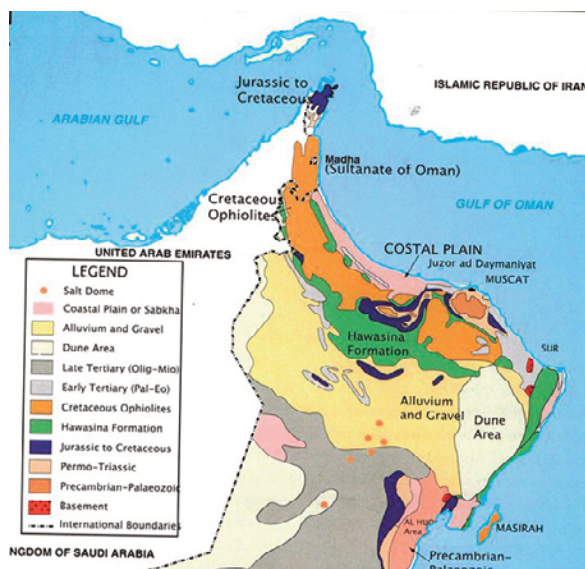
Autumn & Winter Zoom courses and individual sessions...

This Autumn and Winter we will be presenting several series of mainly live, hour-long Zoom sessions. Some are available as single sessions whilst others are courses consisting of 6 or 10 sessions. Most begin in November with some continuing after a break for Christmas and New Year.

All our Zoom classes and courses are available to everyone and are informal and designed to be both educational and enjoyable. We have a great and varied online community. You would be most welcome to join us!

Please see below for our programme up to the end of this year, further courses and sessions will be available to book in November for the Winter period.

The Geology of Oman and the Strait of Hormuz Special Session, Monday November 2 £15.00



The country of Oman and Strait of Hormuz have hardly been out of the news for the past few months, ever since the start of hostilities between the US and Iran. But aside from oil and gas, what else is in the geological story?

Explore with us in this extended Zoom session all about the geology of the region. You'll learn why this is such an important and interesting area - prepare for some surprises!

Make sure to book NOW!

The Tectonics of Northern Venezuela Special Session, Monday November 9 £15.00

The tragic twin earthquakes of June 24th 2026 will probably go down as one of the worst natural disasters of modern times. In this specially extended Zoom session we will explain why this happened by looking at the regional and more local tectonics. We'll also examine what could have been done to minimize the number of casualties, by way of design for buildings and infrastructure, especially bridges and roads. *If two people share the same computer screen the cost is £22.00 for these sessions.*

Metamorphic Rocks - rocks from the pressure cooker (10-weeks)
It has been several years since we last offered this course and it always proves to be a popular choice. We take the mystery out of metamorphic rocks by taking a close look at how they form from existing rocks of all types.

The course is arranged in a way that covers all the basic elements of metamorphic rocks. It takes you through how metamorphic rocks form, the textures the rocks exhibit and the minerals that make them up. You'll learn about contact, regional and dynamic metamorphism and how we classify these enigmatic rocks. **Course dates: Starts Monday November 16 - December 14 and then restarts January 18 for a further 5 weeks.**

Cost: Ten hour-long Zoom sessions with electronic background papers £80.00 for one person or £100.00 for 2-people studying together. Printed background papers cost an additional £25.00. Zoom sessions on Mondays at 2.00 and 7.00 pm (you choose)

The Wednesday Club

We started this eclectic mix of subjects on Wednesday afternoons and evenings two years ago and they are now a firm favourite with many of you. We hope that you like our new selection - they are all designed to bring you up to speed on some of the very latest ideas on a variety of very different subjects.

You can take individual sessions or why not dive in for them all and make a significant saving into the bargain!

November 11	Geological riches of the Yorkshire Coast
November 18	Alfred Harker - an extraordinary geologist
November 25	Anorthosite - a rock that's out of this world!
December 2	The unique geology of Islay, Jura & Colonsay
December 9	Extremes & extinctions in the Tertiary
December 16	Tyrannosaurus rex from bones to Hollywood

Cost: Individual talks £11.00 or £16.00 for 2 people. Take all 6 sessions for £50.00, or £75.00 for 2 people. Timings: Wednesdays at 2.00 or 7.00pm - your choice.

In the steps of the pioneers (6-weeks)

The history of geology is closely linked to a few individuals, many of whom were British. They each made their indelible mark on our subject in a unique way. In this course we'll take a look at the life and achievements of 'six of the best'.

We'll be studying these pioneers: Adam Sedgwick, Roderick Murchison, Charles Lapworth, Mary Anning, Henry de la Beche and George Barrow.

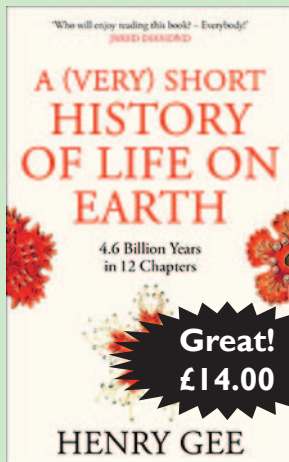
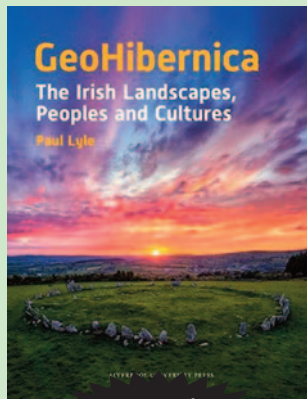
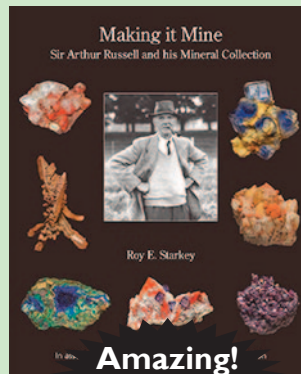
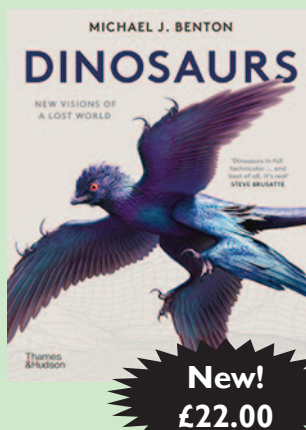
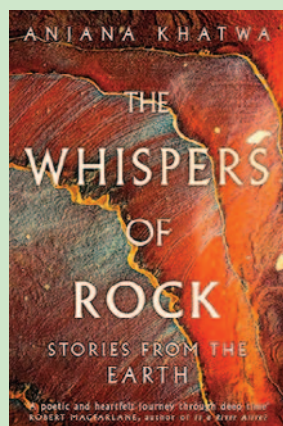
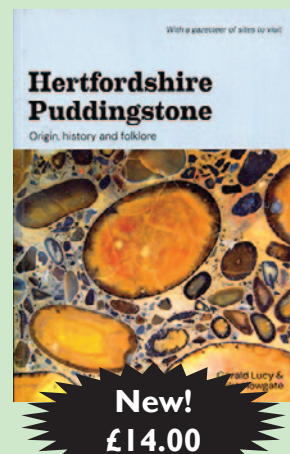
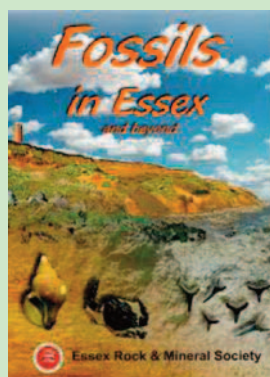
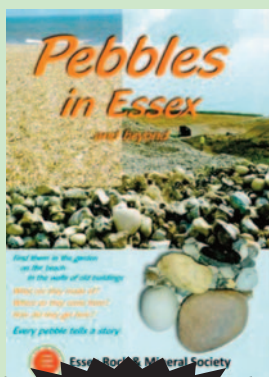
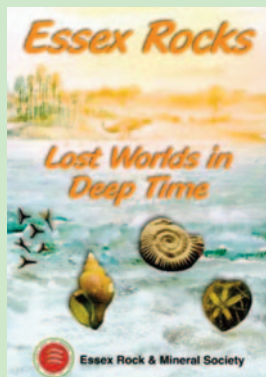
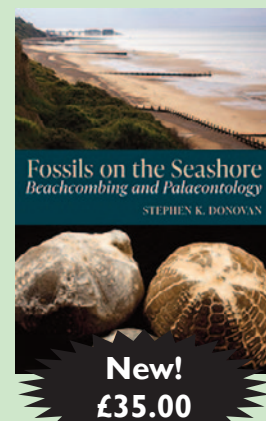
Course dates: Starts Thursday November 12 and runs through to December 17

Cost: Six hour-long Zoom sessions with electronic background papers £50.00 for one person or £70.00 for 2-people studying together. Printed background papers cost an additional £15.00. Zoom sessions on Thursdays at 2.00 and 7.00 pm (you choose)

To find out more or to enrol, email us at: downtoearth@geosupplies.co.uk or ring us on: 0114 245 5746 To enrol, go to: www.geosupplies.co.uk. enter our online shop FIRST and THEN find the course.

Featured books for October 2026

In each issue we are pleased to be able to introduce you to a range of featured books. Where they are being offered at reduced prices, these will be current to the end of October 2026 provided that stocks are available. This month we feature a variety of different books. N.B. all prices include UK postage.



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