

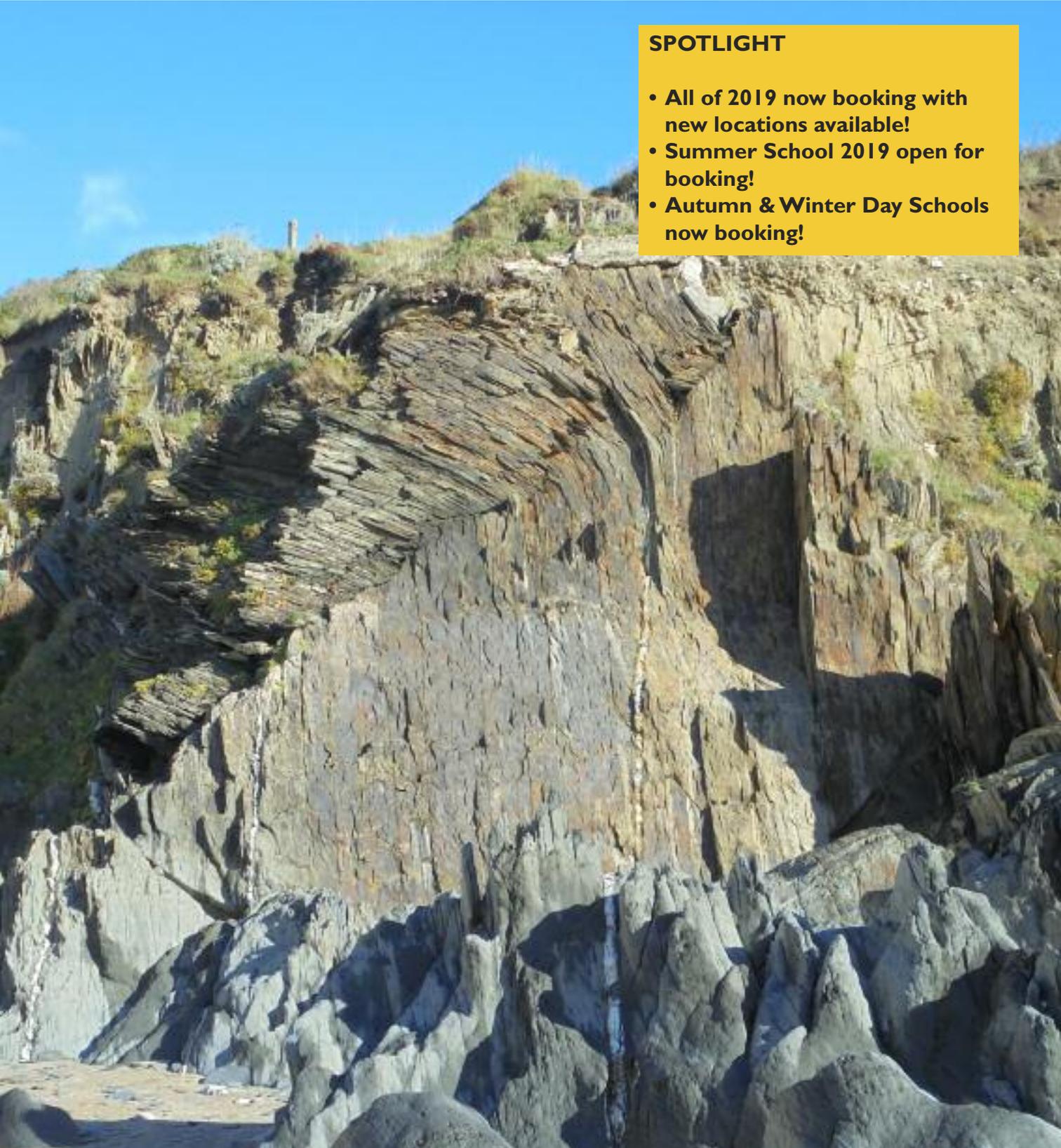


# Down to Earth *extra*

Issue 71 November 2018

## SPOTLIGHT

- All of 2019 now booking with new locations available!
- Summer School 2019 open for booking!
- Autumn & Winter Day Schools now booking!



*Folded Picton Shales from the Upper Devonian at Woolacombe in North Devon. This was deformed during the Hercynian Orogeny at the end of the Carboniferous. (Photo: Chris Darmon)*

## From the Editor...

Few things are more emotive these days than climate change. With the publication of the report from the Intergovernmental Panel on Climate Change (IPCC) the issue has once again risen to the top in terms of public perception. Make no mistake, there is a very serious and real threat to the future of the planet. However, that threat isn't confined to global warming and it isn't new. For more than fifty years, there have been dire warnings that the world is suffering from over-population.

Still the population grows and the food needs of this growing population have to be met. Here, as with global warming, people seem to see it as somebody else's problem and not ours. So when the Chinese government introduced it's one child policy (now largely rescinded) we thought it was a good idea, but we'd never tolerate such a policy here in the UK.

It's no different when it comes to combating climate change. What are we, as individuals and as a nation, prepared to do? I enjoy fresh garden peas. Currently, Marks and Spencers bring them in by air from the likes of Kenya or Guatemala. Whilst me refusing to buy them won't change what M&S does, if we all refused to buy them, it would. Likewise when it comes to car usage. Can we cut down on our mileage? Should we be offering a discount to those of you who come to our field trips by public transport?

But some issues are far from clear cut. In the August issue of *Down to Earth* I described people who deny climate change and anti-frackers as 'enemies'. I was roundly condemned by one reader who demanded that I retract the statement about anti-frackers. But let's be realistic. Millions of people here in the UK rely on gas for heating and cooking. With offshore gas supplies running out, isn't it better to use our gas than gas from Russia or fracked gas from the USA? Only in the longer term can we solve problems like this.

*Chris Darmon*

*Down to Earth extra Editor*

## Have you booked a residential trip for 2019 or an Autumn/Winter Day School yet?



### news update

#### **Wolf Minerals goes into administration putting 200 jobs on the line and closing Devon mine...**

The Australian listed tungsten mining giant, Wolf Minerals has gone into voluntary administration causing the immediate closure of Drakelands Mine at Hemerdon, near Plymouth.

We understand that the Company employed about 200 workers at the enormous opencast pit with more employed by contractors. Following the announcement of closure, there were scuffles at the mine site as some of those affected tried to remove disputed plant and materials.

Drakelands Mine, which has now been open a couple of years, has struggled to be economically viable. Even with the initiation of



*The processing plant at Drakelands Mine*

24-hour working, the processing mill has struggled to extract enough tungsten. Wolf's main financial backers RCF have continued to pump money into the operation, the last injection £4 million being as recent as July. Meanwhile world tungsten prices which peaked earlier this year, have now fallen a little.

In this climate it's hard to see that Hemerdon has a future, even in new hands, were a suitable buyer to be found. According to analysts this is a massive blow for the UK mining industry. It's almost bound to dent confidence in projects such as South Crofty in nearby Cornwall.

In a further move, Wolf Minerals (UK) Ltd, was wound up on October 18th, 2018 following a hearing in the High Court. This really does sound like the final chapter in the long saga of mining at Hemerdon, that began around the time of the Second World War.

#### **Earliest flesh eating fish is 150 million years old, say scientists...**

A relative of the modern day piranha has been unearthed in South Germany and has been hailed as the world's oldest flesh eating fish. They have the distinctive razor sharp teeth of modern day piranhas. They used these teeth to tear off the flesh and fins of other fish,

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according to Dr David Bellwood of James Cook University, Australia who jointly carried out the research with the Jura Museum in Eichstatt in Germany. The findings have been published in the journal *Current Biology*.



*The well preserved fossil fish (Photo: M. Ebert & T Nohl)*

According to Martina Kolbl-Ebert, vertebrate palaeontologist and Director of the Jura Museum “It was a wolf in sheep’s skin”. She went on “This one had daggers and scissors in the mouth, implying a completely different mode of feeding.” The fossil has been named *Piranhamesodon pinnatomus*.

### Geology’s ‘holy grail’ gets a welcome makeover...

Visitors to the world famous site at Siccar Point in Berwickshire are now able to see a significant improvement in signage thanks to a new partnership between Edinburgh Geological Society and the oil and gas operator Siccar Point Energy.

The Company has funded new information boards at the isolated site, as well as 20,000 leaflets that highlight the unique history and geology of Siccar Point. It was here, in 1788 that James Hutton confirmed his



*Bob Gatliff (Edinburgh Geological Society) and Doug Fleming (Siccar Point Energy) at Siccar Point. (Photo: Chris Watt)*

idea of ‘the abyss of time’. He described the rocks, either side of the unconformity in flowery language and declared that in geological time “he saw no vestige of a beginning, no prospect of an end.”

Even today, Siccar Point is something of a Mecca for geologists from around the world who come this place to pay homage to Hutton and what was, at the time, a controversial idea. Over the years there have been ideas for the creation of an access route to the beach but, so far at least, that has not come to fruition.

Doug Fleming, Chief Financial Officer of Siccar Point Energy said: “As an oil and gas company geology is at the heart of what we do Hutton is an inspiring example of a scientist who followed the evidence and defied the conventional wisdom of the day. It’s a great example for a young company and a fascinating piece of Scottish history to preserve and to continue learning from.”

The company is also exploring further opportunities to enhance the site with the Edinburgh Geological Society. The Society is currently working with heritage organisations and universities on plans to mark



## Show Dates

October 27 & 28 Rock, Gem ‘n’ Bead Show  
**Newton Abbot Racecourse, Devon**

November 3 & 4 Rock, Gem ‘n’ Bead Show  
**Cheltenham Racecourse, Gloucestershire**

November 10 & 11 Rock, Gem ‘n’ Bead Show  
**Kempton Park Racecourse, Staines**

November 17 & 18 Rock, Gem ‘n’ Bead Show  
**Brighton Racecourse, Sussex**

**All shows are indoors with refreshments & ample free parking**

**All shows are open: 10am - 5pm Saturday  
 10am - 4pm Sunday**

**Admission (one entrance fee covers the whole weekend):**

**Kempton Park: adults £5.50, seniors £3.00**

**All other shows: adults £4.50, seniors £2.00**

**All shows: children 8-16 £1.00, under 8's free**

**Rock and Gem Ltd., 27 Common Hill, Steeple Ashton,  
 BA14 6EE Tel: 01380 871835 • <http://www.rockngem.co.uk>**



*This splendid new information board at Siccar Point is one of the first fruits of a partnership between Edinburgh Geological Society and Siccar Point Energy. (Photo: Chris Watt)*

the 300th anniversary of James Hutton's birth in 2026, and to celebrate Hutton's legacy in subjects including agriculture, meteorology and geology.

Bob Gatliff of Edinburgh Geological Society said: "The support from Siccar Point Energy will make a tremendous difference to our plans to preserve and promote the area."

He went on: "Our long-term ambition is to do more to support the education and tourism potential at Siccar Point and this is a great first

step in that direction."

Yes, an access to the shore here would be great, but in the short term, perhaps use could be made of technology for a 'virtual visit'.

*With thanks to Malcolm Mundy for bringing this to our attention and Border Telegraph for much of the material.*

### No Katla eruption - despite what the paers say...

*Around September 23rd, there were a number of reports circulating in the British news media that one of Iceland's most famous volcanoes, Katla, was about erupt. Hearing nothing further, I checked the reports out in the Icelandic media, to be somewhat surprised to find this on Iceland Monitor:*

British newspaper *The Sunday Times* have apologized for their cover story of an imminent eruption in the Katla volcano in Iceland, a story that was factually incorrect. Volcanologist Evgenia Ilyinskaya who was interviewed in the story was misquoted and demanded a correction. The apology is as follows:

"Our story on the Icelandic volcano Katla (World News, last week) included incorrect quotes from Evgenia Ilyinskaya, of Leeds University. While the study she co-authored found that Katla is producing large volumes of carbon dioxide, it made no claims regarding the current level of magma or the imminence of an eruption; and she did not claim that the volcano was likely to produce a larger ash plume than that of Eyjafjallajokull in 2010. We apologise for the error."

**Volcanic Experiences** tel 01527 832 370

*Experience some of the most spectacular sights nature has to offer!*

## Volcanic Experiences 2019

Small group tours to areas of superb geological interest

**Sicily & the Aeolian islands ~ May 16th to 23rd**  
(includes visits to Etna, Vulcano and Stromboli)

**Iceland: Myvatn & the active North ~ September 4th to 11th**

**Sorrento & the Bay of Naples area (Vesuvius & Pompeii)**  
~ October 26th - November 2nd

Special tailor-made tours also arranged for local groups, schools and colleges

For further details contact Alan Clewlow on 01527-832578

**Volcanic Experiences Ltd.**  
19 Manor Court Road,  
Bromsgrove, Worcs.  
B60 3NW

[www.volcanic-experiences.co.uk](http://www.volcanic-experiences.co.uk)

**Alan Clewlow**

# North London Mineral, Gem & Fossil Show

**Saturday**  
**24<sup>th</sup> November 2018**

10.00am – 4.00pm

**+ Jewellery, Raffle & Lucky Dip**

**TRINITY CHURCH**  
NETHER STREET, N12 7NN

Near 'Tally Ho' Pub & Artsdepot, Ballards Lane, North Finchley  
See map overleaf

Local car parking + nearby undergrounds - Northern Line **West Finchley** + **Woodside Park** Stations.  
No.'s 13, 125, 460 buses from **Finchley Central** to Tally Ho'

**ADULTS £2 Accompanied children under 12 - Free**

Large Hall with stalls + refreshment area

**Amateur Geological Society**

For contact details and all about us: [amgeosoc.wordpress.com](http://amgeosoc.wordpress.com)

## Volcanic Experiences 2019

Alan Clewlow has now been arranging “Volcanic Experiences” escorted group tours to volcanically active areas of the world for over 20 years. The tours are open to all adults but offer particular interest to members of local geology societies and those with some knowledge of geology, with the chance to see recently formed rocks and features and for some of the tours, the possibility of viewing an erupting volcano. Next year, they are offering five tours. The trips early in the year to Tenerife and Chile/Argentina were filled some time ago, but details are now available for the tours scheduled for the summer and autumn.



*Image showing fumaroles (steam vents) on the crater rim at Vulcano (Photo: Alan Clewlow)*

One of their most popular tours is the visit in May to Sicily and the Aeolian Islands ~ a cluster of volcanic islands lying to the north of Sicily. The tour takes in three active volcanoes ~ Etna, Vulcano and Stromboli. Mount Etna is Europe’s highest and most active volcano, having erupted regularly in recent years with frequent lava flows. The visit to Vulcano gives the opportunity to climb to the crater rim to see hissing sulphurous steam vents and to bathe in hot springs and bubbling mudpools. The highlight of the one-week tour for many is probably the visit to Stromboli. This island has been called “the Lighthouse of the Mediterranean” since Roman times. Its volcano sends out an explosive burst of lava into the atmosphere every few



*Stromboli in eruption at dusk, as seen from the summit ridge (Photo: Alan Clewlow)*

minutes. Many people opt to take the climb which reaches the summit area at sunset, being able to view the eruptions from a safe distance in darkness, when they are at their most spectacular, though some opt to stay closer to sea-level, where the view is still very impressive. The tour offers a full programme of guided excursions with direct flights between London and Sicily, and good quality accommodation, having 5 nights based on the island of Lipari and 2 nights on Sicily.

The tour in September focuses on active north of Iceland. After spending the first evening in Reykjavik, the group first heads to Þingvellir, where the Eurasian and North American plates are moving apart, taking in the classic “Golden Circle” sites at Geysir and Gullfoss. After an overnight stop at Blönduós, the group then heads for Myvatn, the base for the next four nights. From there, over the following days they explore a range of volcanic and landscape features around Myvatn itself and in the surrounding area, including Krafla (the site of the “Krafla Fires” of the 1970s), the huge waterfall at Dettifoss (Europe’s largest waterfall), the Tjornes peninsula, the giant canyon at Asbergi and Hverfjall (“crater mountain”). There will also be the opportunity to take part in a whale-watching excursion from Husavik or an excursion into the wild interior to the dramatic caldera at Askja. After a final night of the tour in Reykjavik, there is a free morning in the city before the return flight back to the UK.

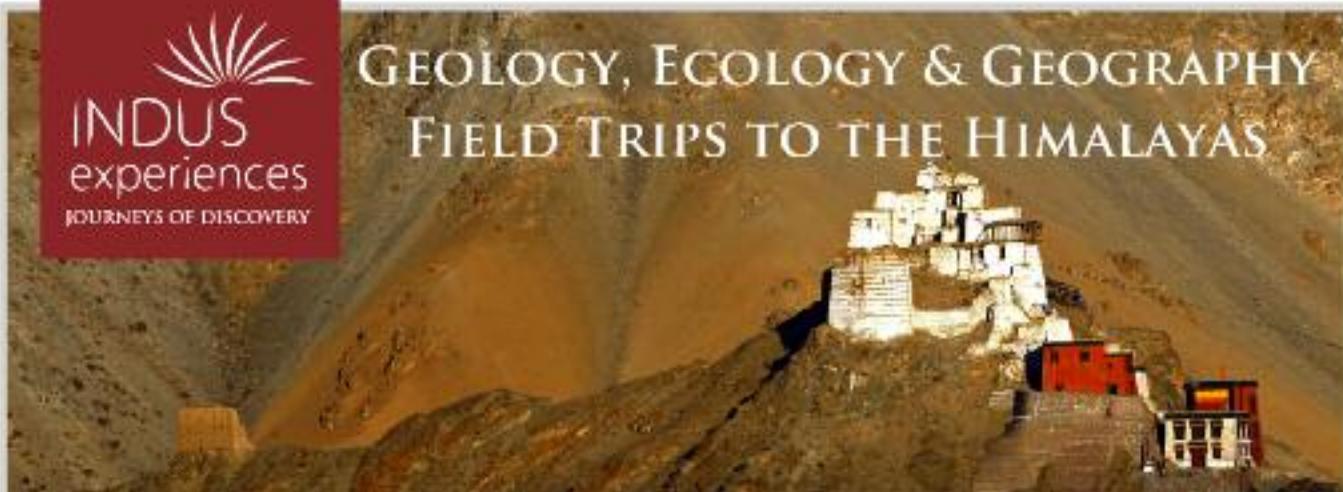


*The summit area of Etna, taken in 2017 (Photo: Alan Clewlow)*

The last tour of the year in October to the Bay of Naples area and is based in Sorrento at the 4-star Cesare Augusto hotel. It is a mix of geology and archaeology. The week will include excursions to the classic sites associated with the catastrophic eruption of AD 79 ~ Pompeii, Herculaneum and a walk around the rim of the summit crater at Vesuvius. Time is also spent visiting the geologically active Phlegrean Fields and the Solfatara volcano to the west of Naples and includes a visit to the National Archaeological museum in Naples, in which many of the best finds from Pompeii and Herculaneum are housed. Other days include a boat trip to Capri and a coach excursion along the famous “Amalfi Drive” cornice road to the site at Paestum, where some of the finest Greek Temples in Italy are found. The trip also includes a free day which can be used to spend time in Sorrento or explore other sites on the Sorrento peninsula, or take a hydrofoil across the Bay of Naples to the city itself or to the delightful island of Ischia.

*To find out more about the 2019 tours, including a full day-by-day account of the itinerary, accommodation, excursions and travel arrangements, go to the Volcanic Experiences website at: [www.volcanic-experiences.co.uk](http://www.volcanic-experiences.co.uk)*

# GEOLOGY, ECOLOGY & GEOGRAPHY FIELD TRIPS TO THE HIMALAYAS



## SPITI & LAHAUL INDIA

Led by Heather Kelly & John Macgillivray

27<sup>th</sup> July to 14<sup>th</sup> August 2019 (18 days)

**Per person sharing a room £3970.00 with flights. Single Room supplement £730.00**

For People with a sense of adventure, who would like to explore this little-known part of the high Himalayas close to the border with Tibet. We will see some dramatic geology, look at some of the plants and animals which make their home in this mountain desert and visit ancient Buddhist monasteries. The area is remote, the roads are rough and the driving slow. Accommodation will generally be in basic hotels, home stays and a tented camp though the hotels in Delhi and Shimla, at the beginning and end of our trip, will offer a touch of luxury.



## KASHMIR & LADAKH INDIA

Led by Dr Danny Clark-Lowes

3<sup>rd</sup> to 18<sup>th</sup> August 2019 (16 days)

**Per person sharing a room £3350.00 with flights. Single Room supplement £640.00**

Experience the rich culture of Kashmir & Ladakh, contrasting the beauty and charm of the Kashmir valley with the splendour of the Ladakh mountains. Transport will be in comfortable vehicles, on tar and dirt roads through wild valleys and over high passes (going up to 5,000 metres above sea level). Trek in remote valleys, up to a glacier snout and to the suture between the Indian and Asian plates, visit Buddhist monasteries and temples perched on remote hillsides. Accommodation in Srinagar will be in period houseboats on Nagin Lake, good hotels, local lodges elsewhere and at a well-appointed camp at Tso Moriri.



## ANNAPURNA - NEPAL HIMALAYA

Led by Dr Danny Clark-Lowes

5<sup>th</sup> to 19<sup>th</sup> October 2019 (15 days)

**Per person sharing a room £3370.00 with flights. Single Room supplement £395.00**

Study aspects of the geology and geography of the spectacular Himalaya and gain an insight into the history, culture and religious beliefs of the region. Journey along mountain roads and tracks offering splendid views of some of the highest mountains of the Himalaya. Undertake treks in beautiful valleys, particularly along the Kaligandaki River, where geological exposures are dramatic, and the varied flora is abundant. Accommodation will be at good hotels and local lodges. This trip is suitable for amateur geologists, those with an interest in learning some geology and those who simply enjoy being in the mountains.

Full details of itineraries, costs and how to book these tours please visit

[www.indusexperiences.co.uk/earthsciences](http://www.indusexperiences.co.uk/earthsciences)

E: [holidays@indusexperiences.co.uk](mailto:holidays@indusexperiences.co.uk) T: 020 8901 7320



## Autumn Day Trips

*The standard price is £15.00 per person, with some trips at the lower rate of £10.00 per person. All trips offer a £3.00 discount for holders of Club Class, students under 19 and groups of 5 or more people booked together.*

*Day trips are suitable for all levels of knowledge, unless shown otherwise. Please note however that most involve modest walks. If in doubt, please ask. Accompanied children, and dogs, are usually welcome!*

**Saturday, October 27**

**The North Norfolk coast**

Come and see some of England's youngest strata. These early Quaternary sediments show us evidence for climatic changes that are both stark and dramatic. There are also huge rafts of chalk left high on the cliff tops, but how have they got there?

*Meeting: Hunstanton Beach Terrace Road car park at 10.30  
Standard prices apply.*

## Autumn & Winter Day Schools

*We are pleased to announce a new programme of day schools this Autumn. These courses normally run from 10.30 to 4.00 and always involve lots of hands on practical work. They are suitable for people with a range of geological knowledge, including beginners. A discount of £5.00 per person is available for holders of Club Class and groups of 6 or more people.*

**Friday, November 9**

**Chappell Centre, Congleton, Cheshire**

*"All that glitters is not gold"* is a lively look at minerals through the medium of some nice specimens and photographs. Suitable for beginners as well as experienced people. **£35.00 including lunch.**

**Wednesday, November 14**

**Lea Valley YHA, Cheshunt, Hertfordshire**

*"Geological Jigsaws"* - piece the evidence together and make sense of an imaginary geological map. Uses specimens and photographs in a fun way for everyone to enjoy. **£35.00 including lunch buffet.**

**Saturday, November 24**

**The Bridges Centre, Monmouth, Gwent**

*"Geological Maps and how to read them"* - a hands-on practical day that will take you on a journey that will explain what geological maps show, and how you can get the most out of them. This is a day school that we have successfully rolled out in many places, but never before in Wales! **£35.00 including lunch buffet.**

**Saturday, December 1**

**Commercial Union building in central Newcastle upon Tyne**

*"Geological Jigsaws"* - piece the evidence together and make sense of an imaginary geological map. Uses specimens and photographs in a fun way for everyone to enjoy. **£25.00 inc. light refreshments.**

**Wednesday, December 5**

**Lapworth Museum, University of Birmingham**

*"Fossils for everyone"* - you don't have to be a palaeontologist! This day school will allow you to examine some superb material and also



*The Lapworth Museum, University of Birmingham*

to hear from experts how fun fossils can be! See some of specimens collected by famous geologists from the nineteenth and early twentieth centuries. **£20.00 including light refreshments.**

**Saturday, January 26**

**St Pancras YHA, Euston Road, Central London**

*"All that glitters is not gold"* is a lively look at minerals through the medium of some nice specimens and photographs. Suitable for beginners as well as experienced people. **£45.00 including lunch.**

**Saturday, February 2**

**Commercial Union building in central Newcastle upon Tyne**

*"Fossils for everyone"* - a great mixture of practical hands on with specimens and some real fossils, some great images and also some sound basic teaching. Fossils aren't just for the super keen palaeontologist, they are for everyone!

**£25.00 including light refreshments**

**Wednesday, February 6 (To be confirmed)**

**Lapworth Museum, University of Birmingham**

*"All the time in the world"* - a look at the vast expanse of geological time. How do we know the age of rocks? How is time divided up? Who were the people behind geological time?

**£20.00 including light refreshments.**

**Wednesday, February 20**

**Conservative Club, Devizes, Wiltshire**

*"Geological Jigsaws"* - our brand new fun day comes to Wiltshire - join in the fun of our latest mind-bending exercise involving specimens, pictures and a map, all designed to stretch your knowledge! **£35.00 including lunch buffet.**

**Saturday, March 9**

**The Commercial, Chapeltown, Sheffield**

*"Every picture tells a geological story 2"* - a repeat of our popular day school, using 30 brand new images, accompanied by some super specimens. This is always good fun as you seek to match up the specimens to the images. Some are easy but others will stretch you! **£35.00 including a 'Commie' buffet lunch.**

**Wednesday, March 13**

**Lea Valley YHA, Cheshunt, Hertfordshire**

*"All the time in the world"* - takes a long look at geological time and how we divide it up, through the medium of selected geological locations, specimens and maps. We'll also learn about some of the pioneers of our subject. **£35.00 including lunch.**

## January 2019 distance learning courses

*For this coming Winter we are running one brand new course entitled "Around the world in 10 great geological stories". We'll also be offering the following courses in the "How the Earth works" and "Time Traveller's Britain: Part 1" as supported self study course on Moodle, our easy to access learning platform.*

*"Around the world in 10 great geological stories" is a 10-week course that will take a look at some of the world's finest geology. It begins with a look at Iceland and how our interpretation has radically changed in the last few years. Also covered are: The Channel Isles, The Himalayas, fabulous fossils from China, Cyprus, The Grand Canyon, The Rockies and Montserrat.  
Cost: £75.00 by Moodle/Email or £100.00 by post.*

*"How the Earth works" is a 10-week course that examines the fundamental workings of our planet. What it is made of, what volcanoes and volcanic rocks tell us about the composition of the continents and ocean floors. Above all, it takes you through the various discoveries that eventually led to the formulation of plate tectonics theory and the impact that has had on our understanding.  
Cost: £75.00 by Moodle/Email, or £100.00 by post.*

*"Time Traveller's Britain Part 1" is a 10-week course that takes a close look at some of the British Isles most treasured bits of geology, along with some of the giants of Earth science. Included in Part 1 of the course are: James Hutton, The Isle of Raasay, Mary Anning, the Highland Controversy, Roderick Murchison and County Antrim.  
Cost: £75.00 by Moodle/Email, or £100.00 by post.*

*Finally, for those of you looking for a beginners' course in geology, we're delighted to be able to inform you that our popular 'Steps towards the rock face' course is now available 'on demand', at any time of the year. It allows you to access the materials at any time for a period of 6 months on our Moodle site, or to receive them in printed form.*

*For further information or to enrol, go to: [www.geosupplies.co.uk](http://www.geosupplies.co.uk)  
Or for more information email: [downtoearth@geosupplies.co.uk](mailto:downtoearth@geosupplies.co.uk)*

## Residential Trips 2019, here's some ideas...

### El Hierro & Tenerife, February 23-March 2

We can accommodate a maximum of 5 more people on this Winter trip to the sunshine of the Canary Islands. El Hierro is the least developed of the islands, and it's also the place where there has been the most recent volcanic eruption! With the island a UNESCO protected natural habitat, this is somewhere to come and sample!



## Jersey, Channel Isles April 20-27

Come and spend Easter with us on the fabulous Island of Jersey! Come and enjoy a bit of French geology! There's a basement of igneous and metamorphic rocks that date back 2 billion years, along with some more recent sedimentary formations.

The scenery, along with the beaches make for an excellent backdrop to our studies. Add in a good quality, family run hotel, and the hoped for warm weather that is so characteristic of the Channel Isles and we are set for a great week! If you want to join us - make that booking without delay!

## Eastern Lakes and Howgill Fells, June 11-16

The title of this trips says it all - you are sandwiched between the Lake District in the west and the Yorkshire Dales in the East and right there in the middle lies our base at Shap Wells and the nearby Howgill Fells.

The Shap Wells Hotel has been welcoming geologists for more than a hundred years, including some of the people who mapped the area. It provides us with the perfect base from which to explore the local area.

*Brochures for all these trips can now be viewed on our website: [www.geosupplies.co.uk](http://www.geosupplies.co.uk)*

*To obtain a booking form for any of the above trips, please contact us by email: [downtoearth@geosupplies.co.uk](mailto:downtoearth@geosupplies.co.uk) or telephone us on 0114 2455746*



### Bhutan Trek & Tour with Geology Focus Led by Dr Danny Clark-Lowes 23 March to 07 April 2019

Taking the Jomolhari Trek in the northwest mountains of Bhutan, this tour, led by geologist Dr Danny Clark-Lowes, will take you through spectacular Himalayan mountain scenery and give you an understanding of how these mountains were formed.

Dr Danny Clark-Lowes is a geologist, educated at Cambridge and London universities, and a mountaineer who has climbed in the Swiss Alps and in the Himalaya.

**Cost for tour is £3,400 excluding flights to and from Kathmandu.**



Contact:

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HimalayanGeoTours  
Oak Court, Silver Street,  
Wiveliscombe, Somerset,  
TA4 2PA U.K.

Facebook Page: [www.facebook.com/clarklowesdd/](http://www.facebook.com/clarklowesdd/)  
Telephone: 01984 624528 • Mobile: 07980 897270  
[d.clarklowes@nubianconsulting.co.uk](mailto:d.clarklowes@nubianconsulting.co.uk)



## All of our 2019 residential trips are now on sale!

## New venues revealed for the Autumn period!

The unstable cliffs of Lower Cretaceous, Hastings Beds at Hastings

We've now released all of our 2019 programme for you to book with the addition of a Peak District Summer School in July and a great Autumn line up.

September sees us breaking new ground in Southeast Cornwall and on the Northumberland Coast. In October, we're taking in the Hastings area, and the Llyn Peninsula.

Apart from the Summer School, single rooms are limited so early booking is advised. At the moment, we have availability on all trips, but this can change very quickly!

To enquire, or get a booking form, you can contact us as follows:

Tel: 0114 2455746

Email: [downtoearth@geosupplies.co.uk](mailto:downtoearth@geosupplies.co.uk)

## The complete 2019 field trip programme...

- El Hierro - February 23 - March 2
- Jersey, Channel Islands - April 20-27
- Oban & Colonsay - May 11-19 - sorry full
- The far north of Scotland - May 31- June 8
- Eastern Lakes & Howgill Fells - June 11-16
- Southwest Scotland - June 28 - July 6
- Summer School, Peak District - July 20-27
- Southeast Cornwall - September 7-14
- Northumberland Coast - September 22-27
- Llyn Peninsula - October 12-17
- Hastings Coast, Sussex - October 22-27

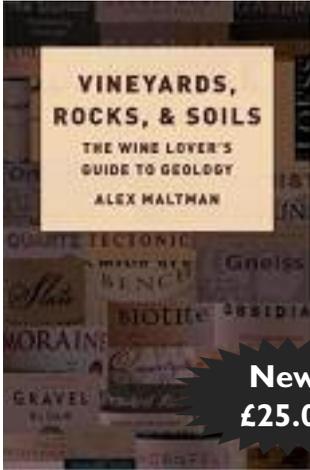
You can view brochures for all of these trips at our website: [www.geosupplies.co.uk](http://www.geosupplies.co.uk)

We look forward to hearing from you!



# Books make excellent Christmas presents

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 the month shown above, provided that stocks are available. Please note, all prices include UK postage.



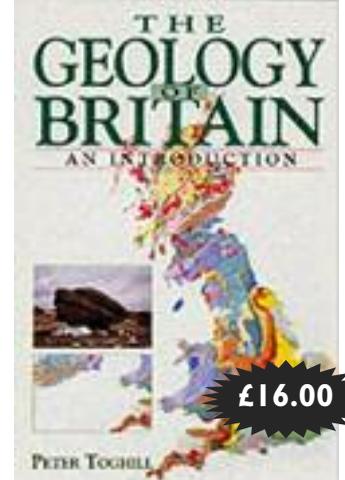
**New!**  
£25.00



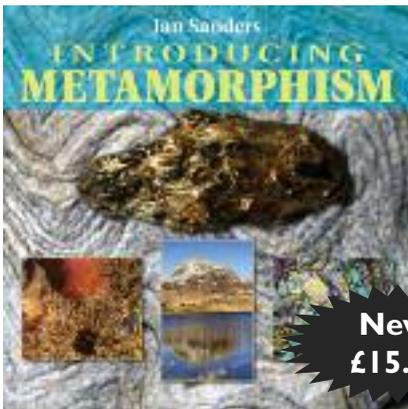
**New!**  
£9.00



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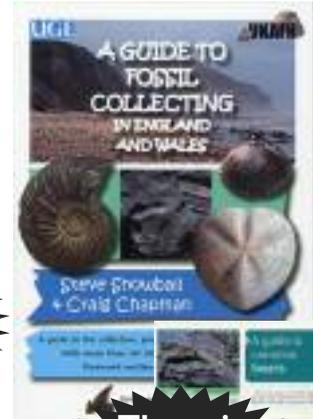
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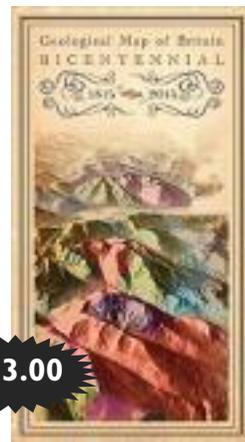


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