



Ussher Society

Newsletter – Autumn

2018



From the Secretary

Dear Membership,



Wow! What a summer we've had! I hope this has meant plenty of time out of doors exploring the geology on our doorstep, especially amongst those coastal outcrops.

No better place given the presence of Autumn is the coast more impressive than about the Hartland Peninsular, where the tectonic forces have folded and sculpted some fantastic outcrops. Photo left is Blackchurch Rock, an arch sea stack composed of layers of sandstone and shale tilted at about 60 degrees. It is dated, using cephalopod fossils called goniatites, to the Upper Carboniferous Crackington formation.

Andrew

secretary@ussher.org.uk

Andrew Green MSc Integrated Petroleum Geosciences / MSc Petroleum Geochemistry
Secretary for the Ussher Society

Chair's Chat

Andy Fleet

The year continues to gallop away. It seems only the other week that we enjoyed the highly successful and well-attended 2018 conference in Falmouth. In reality since then we have experienced beasts from the east, soaring high temperatures and the ever-present machinations of Brexit. In Dorset between February and May we saw the power of the dinosaur. Dippy the *Diplodocus* on the first stop of his UK tour away from the Natural History Museum in London attracted just over 150,000 visitors to the Dorset County Museum, about three times the number of visitors the Museum usually receives in a year. The numbers were not everything, there was a constant buzz of energy that filled the Museum and rippled out through the streets of Dorchester. It was amazing to see how a dinosaur (albeit a cast) and the related exhibitions and activities could excite young and old alike about the wonders of the natural world and in particular those of the Jurassic Coast.

Plans for the 2019 conference in Paignton are well in hand thanks to the efforts of David Roche. You will see details and a call for papers in the First Circular. A problem we have is getting conference speakers to translate their talks into papers that they can submit for publication in the Proceedings, or indeed attract other papers for publication. The Proceedings Editor, Malcolm Hart, addresses this issue in detail elsewhere in newsletter. Please think about how you might help solve the problem.

At the AGM in Paignton we will be electing the Society's committee which is responsible for the Society's activities including the conference, GiSWE proceedings, and website. New blood and energy for the committee is always welcome. If you would be interested in contributing please get in touch.

I look forward to seeing you in the New Year in Paignton for what I'm sure will be a full and fascinating programme.

Note from the Editor of GiSWE Papers Needed Urgently

Volume 14(3): At the Falmouth Conference, I encouraged the membership to submit articles, reviews and papers delivered at the meeting for publication in *GiSWE*. There was a hope, explained at the meeting, that we could return to the previous situation where the papers were published within the calendar year, thereby avoiding the need to have a publication date different to the volume date.

Thus far, in 2018, I have received only one paper, and the hoped for volume is definitely 'on hold'. If the required 8–10 (or more) papers arrive in October–November, we might have a publishable part of *GiSWE* by the spring-summer 2019. Submitted papers must relate to the geographical area of South-West England, though need not have been read at the conference.

There was a full programme of talks and posters at the Falmouth conference and it should be possible to acquire the hoped for number of papers. *GiSWE* has a good turn-round time, is published in full colour (free-of-charge), and the bound volume is distributed to members as part of their membership package. Authors receive a PDF of their paper, which they can distribute to colleagues, though we ask that it is not uploaded onto personal websites or on-line databases such as Researchgate© until after three years, when it will be uploaded onto the Ussher Society website by the webmaster and be available for free download.

Anyone hoping to submit a paper within the next two months (or so) is invited to inform the Editor, Malcolm Hart [mhart@plymouth.ac.uk] as soon as possible.

Change of Treasurer's Address

Please note that the Treasurer's change of address with immediate effect is:

**Treasurer
Mr F. Howie
17 Penlee Manor Drive
Penzance
TR18 4HW**

Committee Changes Treasurer and Committee Roles Available

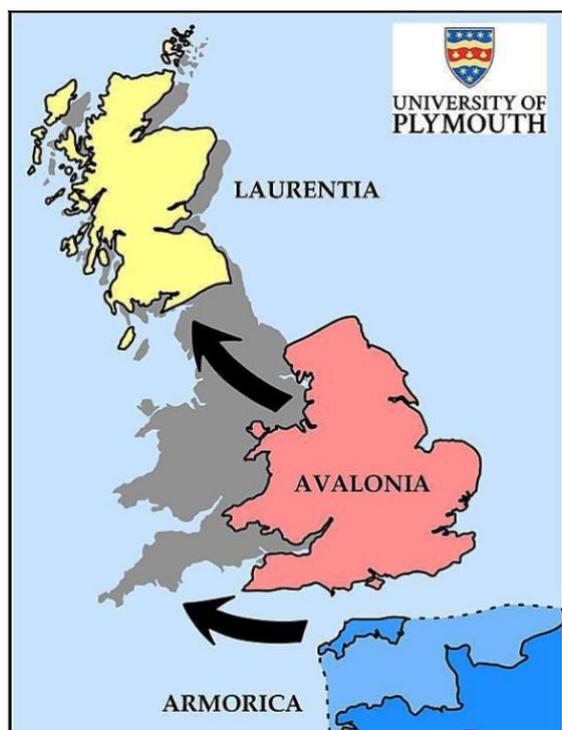
At the upcoming AGM January 2019 Frank Howie, current society treasurer since Jan 2015, will announce his intention to stand down from the role of society Treasurer. We will therefore be looking for a suitable nominee to take up this position. If you have experience with numbers and keeping accounts or would like to get more involved with the society then please consider taking on this role.

If you would any more information as to what the position entails, then please contact the society secretary: secretary@ussher.org.uk

Also there will be new places and opportunities available to join the committee, and have your chance to influence the activity and direction of the society.

New nominees are selected and appointed at the annual AGM, held jointly with the annual conference.

Research into the Origins of the SW's Mineral Wealth



The University of Plymouth have released geological research concerning the historical origin and formation of the southwest (in particular the collision between Devon and Cornwall) of England. The new research looks to provide a new explanation as to the abundance of tin and tungsten in Devon and Cornwall, compared to the rest of the Avalonia. A new feature explaining the groups work is available on the university website:

<https://www.plymouth.ac.uk/news/geologists-reveal-ancient-connection-between-england-and-france>

The work has also been published in Nature Communications (Dijkstra, A.H. & Hatch, C. Mapping a hidden terrane boundary in the mantle lithosphere with lamprophyres. Article 3770 (2018) -

<https://www.nature.com/articles/s41467-018-06253-7>

Abstract: Lamprophyres represent hydrous alkaline mantle melts that are a unique source of information about the composition of continental lithosphere. Throughout southwest Britain, post-Variscan lamprophyres are (ultra)potassic with strong incompatible element

enrichments. Here we show that they form two distinct groups in terms of their Sr and Nd isotopic compositions, occurring on either side of a postulated, hitherto unrecognized terrane boundary. Lamprophyres emplaced north of the boundary fall on the mantle array with ϵ_{Nd} -1 to +1.6. Those south of the boundary are enriched in radiogenic Sr, have initial ϵ_{Nd} values of -0.3 to -3.5, and are isotopically indistinguishable from similar-aged lamprophyres in Armorican massifs in Europe. We conclude that an Armorican terrane was juxtaposed against Avalonia well before the closure of the Variscan oceans and the formation of Pangea. The giant Cornubian Tin-Tungsten Ore Province and associated batholith can be accounted for by the fertility of Armorican lower crust and mantle lithosphere.

New Dorset GA (DGAG) Website

The web site of the Dorset GA (DGAG) has been taken over by a new webmaster and partly revised at <https://dorsetgeologistsassociation.org/> In addition to Dorset it covers part of Devon and Hampshire with the result that much of the content is likely to be of interest to Ussher members. The link to the old site still works, but I expect not for long or, if it continues, will not be updated.

With best wishes,
Ramues Gallois.

International Mining Games



The 40th International Mining Games was held at King Edward Mine near Camborne in March, and was a fantastic success. The men's competition was won for the first time by Camborne School of Mines Sandvik team, and the CSM woman's A team were joint winners with Western Australia School of Mines. The co-ed event was won by Team Hammerslagen and the alumni event by Western Australia School of Mining Alluminati. Congratulations to all of the teams that took part in the 3 day event. The weekend was rounded off at Heartlands in Pool with a visit by the Man Engine at the start of its resurrection tour. More information is available at the CSM IMG website (www.csmimg.com). Next year the 41st IMG is being hosted by the University of Nevada, Reno, USA between the 20th and 23rd March 2019



CSM men's Sandvik team.

New Membership / Membership Renewal Form

Following a year of processing members GDPR forms it has become clear there is no formal process for informing the society of change of member details e.g. change of address etc. Thus a new membership / membership renewal form has been created, which can be found on the societies website:

http://www.ussher.org.uk/Ussher_Society_Membership.htm .

The new form falls in line with new General Data Protection Regulations which came into effect in May 2018 by quoting that you as a member give the society permission to hold and use your provided details. If any of your details change then please at the point of membership renewal complete a new membership form and email it to the society secretary: **Secretary@Ussher.org.uk**

General Data Protection Regulation

As many of you will be aware from your involvement with other regional organisations, societies and groups, new laws concerning the protection and use of any personal information that members provide came into effect on 25th May 2018. The changes saw a new data protection regime come into force, through the General Data Protection Regulation (GDPR) and the Data Protection (Charges and Information) Regulations 2018 (the 2018 Regulations) to better protect people rights concerning how their provided personal information is handled and used.

THANK YOU to all members who completed and returned your GDPR forms. This helps ensure we are operating correctly to protect you and your personal details.

One of the biggest single changes needed by organisations is to not only abide by a common set of data protection principles (provided in the Ussher Society Privacy Policy) but also document why the society needs your personal information and what we intend to do with the personal information we possess (also provided in the Ussher Society Privacy Policy). http://www.ussher.org.uk/Ussher_Society_Membership.htm .

If you are still to complete and return a permissions form, then the form can also be downloaded from the website. http://www.ussher.org.uk/Ussher_Society_Membership.htm .

Events of interest to members

2nd-5th January 2019 The Ussher Society Conference
The Ussher Society is pleased to announce its 58th Annual Conference will be held at the Redcliffe Hotel, Paignton, Devon, from the evening of Wednesday 2nd to Saturday 5th January 2019. This 3-day conference for earth and environmental scientists working in south-west England and related areas includes two days of presentations, and a day of field excursions. If you wish to attend or take part please visit where you will find all the details and the conference first circular:
http://www.ussher.org.uk/Ussher_Society_Conference.htm

Next Edition

I will look to produce another newsletter **March/April 2019**. If you have any knowledge of events which you think may be of interest to your fellow Ussher Members or geological news items which have occurred throughout the South West region, please send them to me for inclusion in the next newsletter by the **By the latest 22nd of February**. Thank you. secretary@ussher.org.uk

Geological Hammers

1lb 16oz Yellow £10 each (~£25 new)

The new head of the Geography department at Shebbear College, Beaworthy has discovered ~25-30 geological hammers which they have little use for. The hammers are painted yellow, are in good repair having seen little use.

If you are interested in purchasing one or several, or know someone who could benefit from there then please contact:

Andrew Holmes

andrew.holme@aecom.com

All monies raised will be invest back into the geography department at the college.

