



Earth Science Education Forum (England and Wales) **Minutes of the 60th meeting**

Held in the Arthur Holmes Room, Geological Society, London. 1.00 pm, 4 October 2016.

Present

Annette Shelford (NHM Learning Team/Real World Science)
Chris King (Earth Science Education Unit)
David Brook (London Geodiversity Partnership)
Graham Worton (Dudley Museum)
Isabel Markham
John Stevenson (BGS)
Lesley Dunlop (English Geodiversity Forum)
Martyn Bradley (Geology Trusts & U3A)
Nikki Edwards (ESTA)
Susan Brown (Rockwatch)

Apologies for absence:

Alan Holiday
Cally Oldershaw
Ken Addison (Oxford University)
Loraine Craig (Imperial College London)
Maggie Williams (Liverpool Uni.)
Nic Bilham (GSL)
Pete Loader
Steve Brace (RGS & IBG)

1. Talk

Graham Worton (Dudley Museum), update to Black Country Geopark application

2 Minutes of the 59th meeting, 15 June 2016

The minutes of the 59th meeting were accepted as a true record. A copy has been placed on the ESEF website.

Action: JS

3 Matters arising

3.1 National Curriculum (KS3 & 4)

GSCE- and A-level geology. Drafts are currently with OFQUAL.

3.2 Training for secondary geology teachers:

Summer school went ahead and was successful.

CK reported ESEU funds has been transferred from Keele and that the money should support Summer Schools well into the future for approx. 12 students; this might include bursaried places for

fieldwork. The 'ESEU money' should also allow the running of 30 workshops for training of school teachers in geology per year for the next two years.

CK flagged the 'Building Earth Science Education Resilience' (BESER) project that was announced at the ESTA conference, which to develop a structure and seek funding to maintain the Geoscience Summer School (training practising teachers with geology degrees to teach A-level geology), to continue the work of ESEU in providing workshops for science and geography teachers, and to develop a programme to develop the UK geoscience education leaders of the future.

3.3 *Geology for Non-Geologists training 'Geolab':*

NE reported that dates hadn't been agreed for the next Geolab event/s.

3.4 *Destination survey for A-level Geology students:*

Nothing to report.

3.5 *National Geology Database:*

The BGS are currently working on adding new geological trails to the map for the Geologist's Association. Large numbers of additional trails were making downloads difficult. BGS have split the map into regions and we are adding the new trails region by region.

Recent progress:

Scotland (45 more added)

North East (4 more added)

North West (33 more added)

Yorkshire and Humber is the next on the list.

The ESEF would like to pass their thanks to Emma Ball (BGS) for her efforts in editing and maintaining the map.

3.6 *Geological poster map of UK and Ireland*

JS reported that there has been no progress since late 2015, but further work on 'degeneralising' the Dalradian will recommence in the next few weeks. The ESEF were generally unhappy about progress and it was suggested that **CK** write to John Ludden, BGS Exec Director, on behalf of the ESEF. [This was done following the meeting, and a positive response form John Ludden received].

3.7 *Future talks and meeting dates*

Thursday 17 November

Special meeting on geoscience outreach by invitation only.

Tuesday 6 December

Outcomes and updates from Special ESEF geoscience outreach meeting

Tuesday 28 March 2017

TBC London Geobus?

Tuesday 16 May 2017

TBC From STEM to STEAM?

4 Finance report

No significant changes to report.

5 ESEF website (www.esef.org.uk)

The website is up to date.

6 Potential collaborative projects

No reported.

8 ESEF Achievements

None reported.

9 AOB

Mobilising the geoscience community

CK reported that he needed to define what the project objectives are more clearly and will circulate an email to this effect. There are 50 000 geoscientists in the country. How can we involve them in geoscience outreach. e.g. Geolodays in Spain; one day in May they take 10 000 members of the public on various field trips or in Canada where 35 or so Geoscape posters have been produced.

SB announced the Festival of Geology, London, which is scheduled for 5 November.

JS announced the week-long, NERC-led, Into the Blue Showcase event at Manchester airport from 25-29 October 2016.

U3A Update from Martyn Bradley

Weekend training course planned around Easter time 2017; Chris King will be involved.

Duncan Hawley emailed in some physical geography updates from the Geographical Association.

1. The physical geography photo competition increased the number of entries (206) - up on last year. The theme is 'Earth enquiry' - and students accompany their photo with an investigative question suggesting how they could find out more about the physical geography in their photo. Judging takes place over this month. We intend to create a display of photo images for the GA Conference next April.

2. At GA conference the Physical Geography Special Interest Group will run an interactive session 'What makes Physical Geography accessible?' This will outline findings about what students find difficult and attractive about PG, will invite teachers to discuss their own experiences and outline some strategies that have inspired and enabled students to tackle some 'tricky' concepts/topics.

3. The PG SIG is also organising a debate at conference, 'The Anthropocene: physical geography or popular culture?' This will engage teachers in thinking about some of the issues linked to the term 'Anthropocene' and possible implications for teaching and student misconceptions ...currently in development...watch this space!

4. GA conference will also see a range of academic lectures on physical geography -yet to be finalized. In addition, there will be a lecture by Dr Richard Waller on 'Glaciated landscapes - geography's icing on the cake' aimed at inspiring and enthusing geography students.

5. The GA website now has a four short videocasts on ice sheets and their impact on landscape and subglacial bedforms by Prof Chris Clarke of Sheffield University - see

<http://geography.org.uk/resources/videocasts/subglacial-bedforms/>

6. The Physical Geography Resources page links directly to ELI activities

<http://www.geography.org.uk/resources/physicalgeographyresources/>

7. There will be an article in the Spring 2017 edition of Teaching Geography journal titled 'Plate Update' - this issue is themed as 'Powerful Knowledge'.

8. The plate update session given at conference in Manchester (2016) continues to have impact. One new 6th form student reported that in early sessions of an A level 'Restless Earth' module they were told to forget what they had learned about convection and movement of plates - as they would be learning about new ideas! Sue Warn - former Chief Examiner for Edexcel A level Geography - is running 6th form conferences for students and contacted to ask about/clarify ideas that she plans to use in workshops.

We will be writing a piece for the OCR Teacher network.

9. We are currently auditing A level/GCSE physical geography on exam specs and identifying areas where teacher subject knowledge needs support, leading to a series of subject knowledge updates for busy teachers (published on the GA website).

10. We are in contact with a German colleague and discussing the possibilities of developing 'Earth Caching' as a way of promoting physical geography and encouraging teachers/students to apply/visit landforms/features outside the classroom.