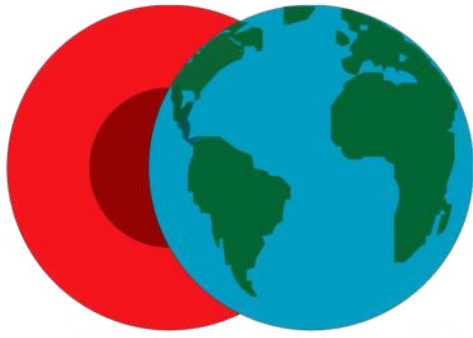


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Volume 6 Issue 2

December 2014

Earth Science Teachers' Association

www.esta-uk.net

Registered Charity No. 1005331

Newsletter Editor: Maggie Williams

ESTA COUNCIL 2014

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## Best wishes for 2015

This second issue of ESTA News for 2014 features photographs illustrating the landscapes and geological features in Australia along the Great Ocean Road, Victoria and in Kangaroo Island, South Australia. These images were kindly provided by Hazel Clark (ESTA member and Editor of *Teaching Earth Sciences*) who spent time earlier this year exploring geology 'Down Under'. *ESTA - A Personal History* written by Peter Kennett has been mailed with your copy of *ESTA News*. Thanks go to Peter for taking the time to record our story for posterity.



The Twelve Apostles by the Great Ocean Road is a collection of limestone stacks off the shore of the Port Campbell National Park. (There are less than ten remaining after erosion)

Do send photographs for the next newsletter to the Editor: [hiatus@liv.ac.uk](mailto:hiatus@liv.ac.uk)

## What's new in the field?



**William Smith 1815 geological map of England and Wales with part of Scotland (reproduction)**

Published 2014. (ISBN 978-0751837889) Price: £12.95.

**The Lost World of Formby Point: Footprints on the Prehistoric Landscape, 5000 BC to 100 BC**

By Gordon Roberts. Published by The Alt Press.

(ISBN 978-0950815527) Price: £3.00.

**The Alderley Edge Mines (revised edition)**

By Chris J Carlon and Nigel J Dibben. Published by Dibben, 2012. (ISBN 978-1782800156) Price: £15.00.

**Iceland (Classic Geology in Europe)**

Published by Dunedin Academic Press in 2014. Written by T. Thordarson and A. Hoskuldsson.

(ISBN: 978-1780460215) Price £25.00.

**The North-West Devon Coast: A Celebration of Cliffs and Seashore, from the Hartland Peninsula to the Taw-Torridge Estuary (2nd edition)**

Published August 2014. Written by Peter Keene (ISBN: 978-0948444654) Price: £15.00.

**Geology and Fossils of the Hastings Area (Second Edition)**

Written by Ken Brooks and published in 2014. (ISBN: 978-09540513348). Price: £11.00.

**The Smaller Lakes and Tarns of Lakeland**

Published by Rigg Side Publications, 2014. Written by Alan Smith. (ISBN: 978-0954467951) Price: £8.99.

# Useful websites

## Web resources

[http://www.midwalesgeology.org.uk/publication\\_files/walk\\_english.pdf](http://www.midwalesgeology.org.uk/publication_files/walk_english.pdf)

A leaflet on the building stone of Welshpool may be downloaded from this site.

<http://www.extremescience.com/earth-science.htm>

Find information on Earth science world records here.

<http://jurassiccoast.org/fossilfinder>

Almost 1000 fossils from Dorset and East Devon museums are available here.

[www.geolsoc.org.uk/Events/William-Smith-Bicentenary](http://www.geolsoc.org.uk/Events/William-Smith-Bicentenary)

Download a fact sheet about William Smith at this site.

<http://whyfiles.org/>

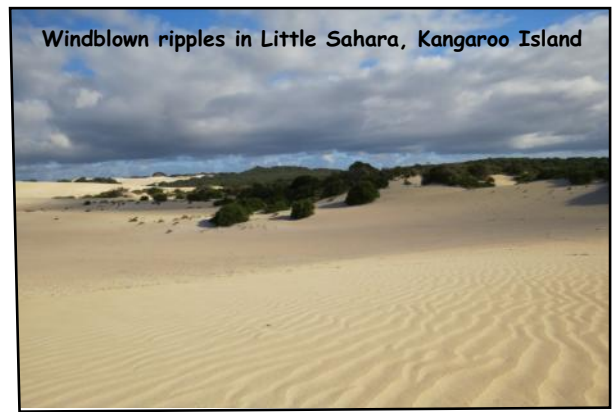
Website explaining the science behind the news. It includes classroom activities.

[www.metlink.org/](http://www.metlink.org/)

This is a useful site about weather for schools. The teachers' section on climate change includes a range of useful resources.

<http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/minecraft/home.html#/6232/64/22413/-11/0/0>

The 2D geology of Great Britain within the world of Minecraft is available on this site.



<<Left  
Fold on north coast of  
Kangaroo Island

Right>>  
Onion scale weathering at  
Remarkable Rocks  
(naturally sculptured  
formations) on Kangaroo  
Island



<http://en.vedur.is/earthquakes-and-volcanism/articles/nr/2947>

Update on the continued Bárðarbunga seismic events and volcanic activity is here with daily notes, factsheets and observations in November.

<http://geologydegree.org/sites-that-rock/>

A site linked to 105 websites providing online resources for students studying geology.

<http://coastalcare.org/educate/beach-basics/>

This site gives information about beaches and beach ecosystems.

<https://www.youtube.com/watch?v=8QNigxTN384&list=UUWJz7ntuXINjkeuIFwdAVvA>

A Natural Environment Research Council (NERC) film exploring the anatomy of an earthquake.

<http://www.theguardian.com/teacher-network/2014/jan/05/climate-change-global-warming-news-teaching-resources>

Information about teaching climate change and a round-up of resources.

<http://geopark.org.uk/pub/2014/07/geology-and-landscape-walking-trails-in-the-geopark/>

This site features many of the trails featured during events the GeoFest 2014 event.

[http://www.cornwallwildlifetrust.org.uk/geology/Downloadable\\_geological\\_walks\\_in\\_Cornwall](http://www.cornwallwildlifetrust.org.uk/geology/Downloadable_geological_walks_in_Cornwall)

Downloadable geological walks in Cornwall.

<http://www.ucl.ac.uk/earth-sciences/impact/geology/walks/building>

London's Geology: Walks to download (and downloadable audio trails, in mp3 format, to accompany the "The City of London walk" brochure).

<http://www.theguardian.com/environment/2014/oct/31/ipcc-report-six-graphs-that-show-how-were-changing-the-worlds-climate>

IPCC report: six graphs that show how we're changing the world's climate.

## News items

<http://phys.org/news/2014-10-chile-earthquake-affects-rupture.html>



Study of Chile earthquake identifies rock structure that affects earthquake rupture.

<http://www.theguardian.com/environment/ng-interactive/2014/sep/23/carbon-map-which-countries-are-responsible-for-climate-change>

Carbon map - which countries are responsible for climate change?

<http://phys.org/news/2014-10-air-earth-tectonicplates.html>

How the air we breathe was created by Earth's tectonic plates.

<http://phys.org/news/2014-10-earth-magnetic-field-flip-human.html#ajTabs>

Earth's magnetic field could flip within a human lifetime.

<http://phys.org/news/2014-09-goce-reveals-gravity-dip-ice.html>

GOCE reveals gravity dip from ice loss (w/ Video)

<http://phys.org/news/2014-09-plate-tectonics-earth-plates-motion.html>

What set the Earth's plates in motion?

# Diary Dates 2015

## 7<sup>th</sup> - 10<sup>th</sup> January

ASE Annual Conference, University of Reading  
Contact: [www.ase.org.uk/conferences/annual-conference/](http://www.ase.org.uk/conferences/annual-conference/)

## 14<sup>th</sup> January

Shropshire Geological Society lecture: "Ediacaran fauna of Charnwood Forest"  
Shire Hall, Shrewsbury  
Contact: [www.shropshiregeology.org.uk/SGS/SGSEvents.htm](http://www.shropshiregeology.org.uk/SGS/SGSEvents.htm)

## 18<sup>th</sup> January

UKAFH Free fossil hunting event. Minster-on-leas, Isle of Sheppey  
Contact: [www.ukafh.com](http://www.ukafh.com)

## 22<sup>nd</sup> - 23<sup>rd</sup> January

Course for 'A' Level Geology Teachers: "Joined Up Geology: Exploring links in Geology"  
University of Liverpool  
Contact: [hiatus@liv.ac.uk](mailto:hiatus@liv.ac.uk)

## 24<sup>th</sup> - 25<sup>th</sup> January

Chepstow Rock Gem 'n' Bead Show  
Chepstow Racecourse  
Contact: [www.rockngem.co.uk](http://www.rockngem.co.uk)

## 1<sup>st</sup> February

UKAFH Free fossil hunting event. Eastbourne, East Sussex  
Contact: [www.ukafh.com](http://www.ukafh.com)

## 14<sup>th</sup> - 15<sup>th</sup> February

Cheltenham Rock Gem 'n' Bead Show  
Cheltenham Pittville Pump Rooms, Cheltenham  
Contact: [www.rockngem.co.uk](http://www.rockngem.co.uk)

## 22<sup>nd</sup> February

Herman Symposium: "Geoscience Frontiers"  
University of Liverpool  
Contact: [hiatus@liv.ac.uk](mailto:hiatus@liv.ac.uk)

## 28<sup>th</sup> February - 1<sup>st</sup> March

Harrogate Rock Gem 'n' Bead Show  
Pavilions of Harrogate, Harrogate  
Contact: [www.rockngem.co.uk](http://www.rockngem.co.uk)

## 7<sup>th</sup> - 8<sup>th</sup> March

Kempton Park Rock 'n' Gem March Show  
Kempton Park Racecourse, London  
Contact: [www.rockngem.co.uk](http://www.rockngem.co.uk)

## 8<sup>th</sup> March 2015

Oxford Mineral Fossil Show  
Exeter Hall, Kidlington, north Oxford  
Contact: [www.oxfordshow.co.uk/home](http://www.oxfordshow.co.uk/home)

## 8<sup>th</sup> March

UKAFH Free fossil hunting event. Bowleaze Cove Dorset  
Contact: [www.ukafh.com](http://www.ukafh.com)

## 13<sup>th</sup> - 22<sup>nd</sup> March

National Science & Engineering Week  
Contact: [www.britishtscienceassociation.org/national-science-engineering-week](http://www.britishtscienceassociation.org/national-science-engineering-week)

## 21<sup>st</sup> - 22<sup>nd</sup> March

Brighton Rock Gem 'n' Bead Show  
Brighton Racecourse  
Contact: [www.rockngem.co.uk](http://www.rockngem.co.uk)

## 27<sup>th</sup> March (starts)

Exhibition: Coral Reefs: Secret Cities of the sea  
Natural History Museum, Cromwell Road, London  
Contact: [www.nhm.ac.uk/](http://www.nhm.ac.uk/)

## 29<sup>th</sup> March

UKAFH Free fossil hunting event. Burnham-on-Crouch, Essex  
Contact: [www.ukafh.com](http://www.ukafh.com)

## 9<sup>th</sup> - 11<sup>th</sup> April

GA Annual Conference and Exhibition 2015: "Making an Impact"  
University of Manchester  
Contact: [www.geography.org.uk/](http://www.geography.org.uk/)

## 11<sup>th</sup> - 12<sup>th</sup> April

Newton Abbot Rock Gem 'n' Bead Early Show  
Newton Abbot Racecourse  
Contact: [www.rockngem.co.uk](http://www.rockngem.co.uk)

## 19<sup>th</sup> April

UKAFH Free fossil hunting event. Mappleton, East Riding  
Contact: [www.ukafh.com](http://www.ukafh.com)

## 25<sup>th</sup> - 26<sup>th</sup> April

Newark Rock Gem 'n' Bead Show  
Newark Showground, Newark  
Contact: [www.rockngem.co.uk](http://www.rockngem.co.uk)

## 1<sup>st</sup> - 3<sup>rd</sup> May

Lyme Regis Fossil Festival 2015 "Mapping the Earth"  
Contact: [www.fossilfestival.co.uk/](http://www.fossilfestival.co.uk/)

## 10<sup>th</sup> May

Oxford Mineral Fossil Show  
Exeter Hall, Kidlington, north Oxford  
Contact: [www.oxfordshow.co.uk/home](http://www.oxfordshow.co.uk/home)

## 24<sup>th</sup> May

UKAFH Free fossil hunting event. Ramsholt, Suffolk  
Contact: [www.ukafh.com](http://www.ukafh.com)

## 30<sup>th</sup> - 31<sup>st</sup> May

Wincanton Rock Gem 'n' Bead Show  
Wincanton Racecourse, Somerset  
Contact: [www.rockngem.co.uk](http://www.rockngem.co.uk)

## 6<sup>th</sup> - 7<sup>th</sup> June

Kempton Park Rock Gem 'n' Bead June Show  
Kempton Park Racecourse, London  
Contact: [www.rockngem.co.uk](http://www.rockngem.co.uk)

## 25<sup>th</sup> - 27<sup>th</sup> September

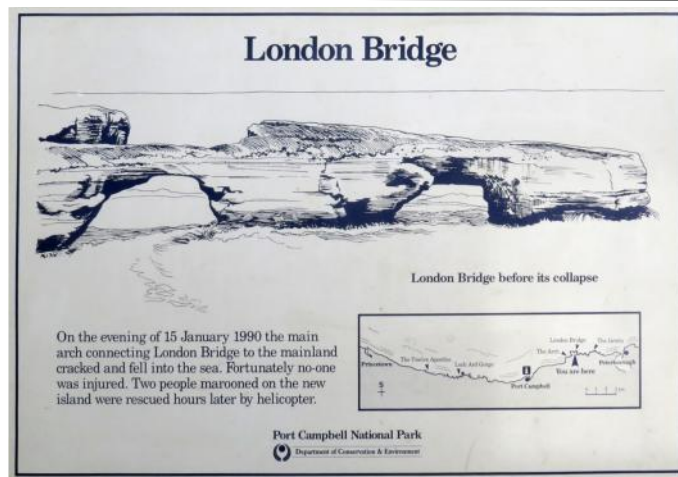
ESTA Annual Course and Conference  
Cardiff University  
Contact: [www.esta-uk.net/](http://www.esta-uk.net/)

## DB Thompson Fieldwork Archive

As a tribute to the life and work of David B Thompson (1932 - 2013), the North Staffs Group of the Geologists' Association and the Earth Science Teachers' Association have published a selection of the fieldwork notes and field teaching exercises produced by David during his time at Keele University. These can be accessed from the NSGGA website: [www.esci.keele.ac.uk/nsgga/dbt.html](http://www.esci.keele.ac.uk/nsgga/dbt.html)



Sea stack, Great Ocean Road



## New items on the ESTA website

1. An interactive map of UK schools teaching *Geology*
2. A photograph of Iain Stewart (our new President)
3. Articles on GCSE and A level reforms
4. The booklet "School Geology Clubs"
5. Entries for the PESGB-ESTA Competition
6. Additional items in GEOTREX



## ESTA Council Exposed!

Council has decided that, to open up our activities to all ESTA members, at each Council meeting we would like to invite one or two members to attend for a one-off experience. Meetings are held on Saturdays three times a year at Keele University and run from 10.30 to around 4.00. We will pay travel expenses (and overnight expenses at the Keele Management Centre if you live so far away that you need to come the evening before). Although tea/coffee and biscuits are provided you will need to bring your own lunch. If you would like to join us for an unforgettable experience (!) please contact David Bailey [esta.secretary@gmail.com](mailto:esta.secretary@gmail.com) Meetings run from 10.30 to 4.00, but if you can't spend a whole day with the "team", you are welcome to join us for part of the day.

## ESTA Secondary Workshop

The next workshop will be on Saturday 6th June, 2015 at Keele University. ESTA will pay travelling expenses, provide lunch and tea/ coffee, and for members travelling a long distance, may be able to provide overnight accommodation. If you are interested in attending please contact Chris King at [chris@cjhking.plus.com](mailto:chris@cjhking.plus.com)

## Are you paying too much?

Standard ESTA membership is £32 per year. If you are retired you can pay the reduced membership rate of £16. If you pay by Direct Debit and wish to reduce the payment to £16, please contact the treasurer, Carole, who will amend your direct debit. Please email [c.a.rushall@durham.ac.uk](mailto:c.a.rushall@durham.ac.uk) or call 07732026511



<<Left  
Unconformity between  
Cambrian rocks and  
overlying Holocene  
cemented dunes at  
West Bay,  
Kangaroo Island

Right >>  
Granite at  
Remarkable Rocks,  
Kangaroo Island



## ESTA volunteers needed

Can you spare a couple of hours to look after the ESTA stand at ASE Conference 2015 (University of Reading) or Geographical Association Conference 2015 (University of Manchester)? If you live near one of these venues and can help, email: [webmaster@esta-uk.net](mailto:webmaster@esta-uk.net) with the subject heading BOARDS.

## National Schools Geology Challenge

If you are interested in competing in the 2015 event, please contact [Joanna.mears@geolsoc.org.uk](mailto:Joanna.mears@geolsoc.org.uk)

## A-level Geology First Destinations Survey

In TES 39.2 there was a report on ESTA's survey of the percentage of students passing A-level who went on to university. The survey covers 2009 to 2013 and we still need more data to make our survey more comprehensive and useful. If you need a form to complete and return, please contact Chris King at [chris@cjhking.plus.com](mailto:chris@cjhking.plus.com)

## Quotes of the day



Wave cut notch and platform, Great Ocean Road

Until 1984, Australia's National anthem was "God save the Queen/King".

Captain Cook discovered Australia looking for the Terra Incognita. Christopher Columbus thought he was finding India but discovered America. History is full of events that happened because of an imaginary tale. - Umberto Eco

Australia is the only country which is also a whole continent.

Australia was the second country to give women the vote.

Don't worry about the world coming to an end today. It is already tomorrow in Australia. - Charles M. Schulz

15 percent of Australia's GDP is derived from mining.

26th January is Australia Day. It marks the anniversary of arrival of the First Fleet of British Ships in New South Wales in 1788.

Australia is the smallest, flattest and driest inhabited continent in the world.

ESTA NEWS is published biannually.  
The next copy deadline is 15th May 2015.

I want to go to Australia and take the same goofy picture of me holding a koala that everyone else takes. - Jessi Klein

