

# EAST HERTS GEOLOGY CLUB

Newsletter No.20

June 2011

## ISLE OF WIGHT WEEKEND

Following on from Steve's Saturday morning school on the geology of the Isle of Wight, 12 of us stayed in or near Sandown for the weekend of 3<sup>rd</sup>/4<sup>th</sup> April.

After enjoying the views of Portsmouth, the Spinnaker and the Solent from the ferry and the short journey on an island train (one of the old ones from the London Underground, the idea for the use of which came from Mike Goodyear's father-in-law as a solution to negotiating the small tunnels on the island) some of us had spare time on the Friday. Youssuf and I paid a visit to Dinosaur Isle, now the home of the geology museum. We were very impressed by the display of fossils and spent a long time in the dinosaur hall, with its fascinating mix of beautiful drawings, models, bones, reconstructions and facts. Diana and Steve had already sussed out an eating place where they were happy to accommodate a large group and there we met up with the rest of the group for a very good evening meal.

Our meeting place for Saturday was Whitecliff Bay, to the northeast of Sandown. Here the Chalk backbone of the Isle of Wight meets the sea at Culver Cliff, with Mesozoic rocks to the south and younger, Cenozoic, rocks to the north. Walking along the cliff face on a falling tide we admired the almost vertical bedding planes and thin layers of pebbles, lignite and flint between thicknesses of sands and clays of varying colours, laid down in varying conditions of shallow seas, deltas, lagoons, lakes and swamps. Fossils found included freshwater galba and planorbina gastropods.

Saturday afternoon saw us at the southern end of Shanklin, after a missed turning saved us a long walk along the promenade and gave us time for a very welcome cup of coffee. From Shanklin Chine (Google 'PLUTO' as a point of interest here) we followed the cliff base almost to Luccombe Chine. All along here marine ferruginous sands are overlain by estuarine Sandrock, below Carstone and Gault Clay. We looked for fossils and around Horse Ledge particularly noted burrows and clusters of rhynchonella.

Having discovered that this coast experiences a sort of double high tide, our

Sunday morning meeting at Yaverland, at the north end of Sandown, involved a bit of dicing with the sea. Having failed to spot any dinosaur



footprints at the start we walked briskly past coloured cliffs and landslipping to an area of thin limestone beds with slabs on the beach containing abundant fillosina, a brackish water bivalve mollusc, and oysters. Lumps of a mudflake conglomerate were also found and admired.

Our last venue was at Roken End, not far from St. Catherine's Point in the south of the island. Parking at the National Trust car park we headed seawards through the quiet, wooded landslip area. Rotational landslipping here involves mudflows of the Gault Clay and getting over these, which we were told shift every year, proved to be an interesting exercise! Once on the beach below, an impressive bright orange shingle, and among the interestingly fossiliferous blocks of Chalk and greensand accumulated there, the scramble was deemed to have been worthwhile and everyone felt this was a fitting end to a happy weekend.

Thank you, Steve, for all your hard work and your hand-outs. Another very successful Club trip.

*Jenny Dixon*

P.S. After we had dispersed, Chris and Mary Bite drove westwards along the coast to Brook, where they saw some dinosaur footprints.  
*Steve P.*

## **Earthquakes – a practical guide with Mike Tuke**

On Wednesday 9<sup>th</sup> March about 15 of us gather at the Mission Hall for a hands-on evening. It was most enjoyable and very instructive.

We thought it was topical as there had only recently been the Christchurch, NZ quake (21 Feb) but it turned out to be even more topical as two days later there was massive quake centred on Tohoku, Honshu, Japan.

Mike set us up in groups with some fascinating bits of equipment made from really rather ordinary items. Felt, assorted blocks of wood, elastic bands and string, sandpaper of different grades and a mini-winch which were all part of his system to show us how earthquakes happen and why they are sometimes big and some times small and sometimes cause considerable damage and at other times are hardly felt.

He demonstrated too why some buildings remain standing and some fall down. It depends on the depth of the quake and the resonance, if I understood him correctly. The chap on the TV news had a very similar piece of equipment to show the same thing about the Japanese earthquake.

To appreciate all we did and learnt you needed to have been there moving blocks of wood with elastic and string along the sandpaper and observing that they did not move evenly or regularly thus representing the effect of movement along a fault plane.

Unfortunately we didn't think to bring a camera but Mary Bite took two photos on her phone.



Mike also does a talk on volcanoes which promises to be as enjoyable. It involves heating syrup!! We plan to book him for a talk cum demonstration in the future. *Diana*

### **Please note**

Managing the geotechnical assets of Hertfordshire Cambridgeshire and Bedfordshire by Christopher Cox had unfortunately to be cancelled as Chris had been sent abroad temporarily. We hope to reschedule the talk for the autumn.

### **Charity Evening – Help!!**

We have been unable to find a speaker. If anyone has any ideas or suggestions please contact the committee asap.

### **Royston Cave visit on Thursday 9<sup>th</sup> June**

Report on this visit in next Newsletter.

### **Field Trip to Folkestone – Sunday 26<sup>th</sup> June**

We are hoping to have a field trip to Folkestone - on Sunday 26th June led by Jack Doyle. If you would be interested please contact Jane on 01920 822405 or janetubb@googlemail.com

### Mid-Summer Special on Friday 24th June 7.30pm

As we have become a bit short of meetings (because of a cancellation) we thought we would extend the Grapes, Wine and Geology Evening.

We will continue after the Talk and Tasting for further Wine (coffee/soft drinks) and nibbles. The Talk and Tasting will cost £5 (£7 for visitors) but as we have to pay for the hall for 2 hours we can enjoy a social time afterwards. If it is fine we will be able to continue in the garden.

Do bring any recent finds along for a "show and discuss". It would also be a good time to talk about ideas for meetings and field visits.

So do please come. It would be helpful to have some idea of numbers for catering.

\*\*\*\* If you aren't coming, is there any reason other than a previous engagement? The committee would like some feed back please. \*\*\*\*

Contact Diana on 01920 463755 or [diana.perkins@btinternet.com](mailto:diana.perkins@btinternet.com)

### Earthquakes, Volcanoes and Tsunamis - Exhibition at Ware Museum. 16<sup>th</sup> July – 8<sup>th</sup> Sept

Although this is being done with children in mind we hope it will be of interest to everyone. If any members have photos I could use I would be very grateful for copies. Check the Museum website for details [www.waremuseum.org.uk](http://www.waremuseum.org.uk)  
Diana

### Spain Field Trip in early October (Tuesday 4<sup>th</sup> to Friday 7<sup>th</sup>).

Andy Jeffries will lead a trip to the Catalonia region. If you are interested and have not yet added your name to the list please do so now.



The main trip in which I will try to organise something with geological interest will be from Tuesday 4th October to Friday 7th October inclusive staying for 2 nights in Cadaqués on the coast and 2 nights inland at Olot. I propose that Saturday 8th (and Sunday 9th in my case) will be more independent sightseeing / walking oriented rather than geological focus, as there is much to see in the area Girona is the nearest major airport, with Barcelona about 60 miles further south.

A number of people have indicated that they may want to extend the trip, and some will get there by train rather than by plane. When I have confirmation of exactly who is coming and for what dates, I will contact two hotels I have in mind and see if they have space for us. At that stage I will get details to you so that you can make your hotel bookings. Also, once it is clear how many we have in the party we can try to work out a more detailed plan so that we can share some hire cars.

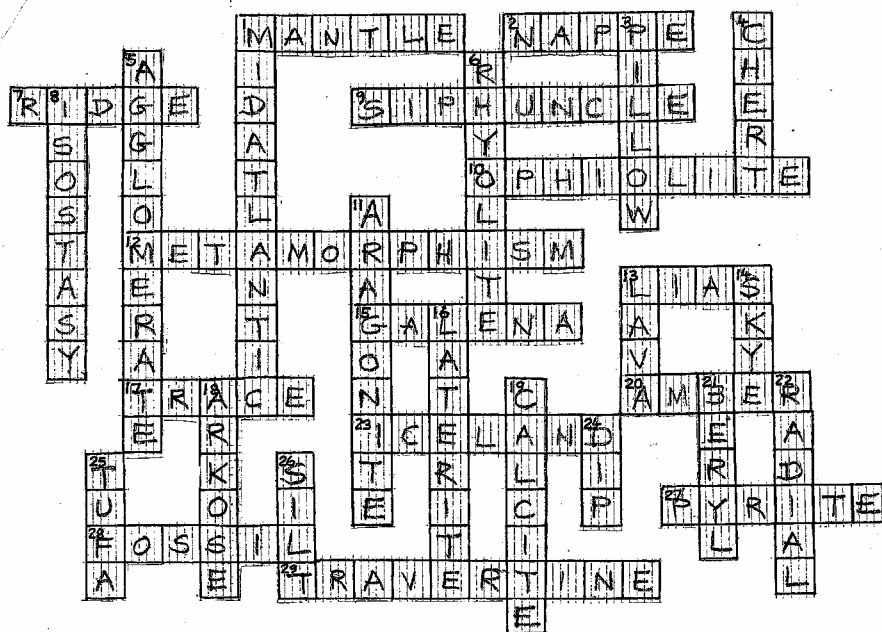
- 1) Please let me know if you intend to come, and for which dates / flights you have booked.
- 2) Let me know if you want to stay in Cadaqués / Olot so I have rough numbers of rooms required in the hotels
- 3) Please let me know if you are prepared to hire / drive a hire car or have space in a car.

I will issue an update with hotel details shortly when I know how big the party will be.

Please confirm directly to my e-mail address at [jeffries.andy1@gmail.com](mailto:jeffries.andy1@gmail.com) .

Andy Jeffries

## Answers to Christmas Crossword



### Across Clues

1. (6) Deep interior part of the lair of a dormant leopard.
2. (5) Geological structure which is widespread in the Alps and is evident in its foreign appearance.
7. (5) See 1 down.
9. (9) Drink small amount of last of squash, with relative. A body part needed for buoyancy control.
10. (9) Mix oil and hot pie, for a slice through the crust and what's beneath it.
12. (12) Mis-hammer pot, with alteration. Heat and pressure do it.
13. (4) Sail back to find a Mesozoic group.
15. (6) Mineral which can be found in Senegal, enabling the state to be self sufficient in concomitant chemical products.
- 17 and 28. (5, 6) Find location of animal or plant relic. Or biogenic sedimentary structure.
20. (5) Beginning of April and second half of December.
23. (7) Look inside a police Landrover for a hot-spot on a constructive margin.
27. (6) Identify this mineral by putting it in destructive fire.
28. (6) See 17 across.
29. (10) French colour in train, with eastern following. A secondary sedimentary deposit.

### Down Clues

- 1 and 7 down (3,8,5) Major global feature: add timing article in chaos.
- 3 and 13 down (6,4) Quiet! Sick night bird in front of a London museum.
4. (5) Hard part of teacher training.
5. (11) Product of volcanic explosions. Behold me speed behind a horse.
6. (8) Product of acid eruption. Flaming grain, by the sound of it.
8. (8) Why I very slowly go up or down even when I'm standing still.
11. (9) Mineral, e.g. on tiara, reconstructed. Not diamond, but could be pearl.
13. (4) See 3 down.
14. (4) Volcanic centre, now only questionably transmarine.
16. (8) Delayed ceremony is a consequence of tropical weathering.
18. (6) A feldspathic rock, or the Noah family's socks.
19. (7) Mineral made by mixing talc with ice.
21. (5) Mineral which can be found by looking back through a flock of lyre birds.
22. (6) Artists make telephone call for a pattern of drainage.
24. (3) Inclination of Steve P's wife.
25. (4) Fault disturbance with loss of last of soil produces a deposit which, except in texture, resembles 29 across.
26. (4) Sediment forming part of fossil tree-trunk