

HHGS Field Trip to Sidmouth – October 2015

To coincide with the Sidmouth Science Festival Geological Extravaganza

<http://www.sidmouthsciencefestival.org/festival/2015/super-science-saturday-17-october-2015/geosciences-hall.aspx>

Many thanks to Allan Wheeler for arranging and leading this terrific trip. Twelve members of HHGS met up in Sidmouth for the Geological Extravaganza arranged for Earth Science week in October. The field trip over several days also took in some of the most spectacular sights and geosites of the south Devon coast.

Sidmouth comes with many benefits over and above its cream teas and friendly guest houses. Situated on the first stretch of the Jurassic Coast, it's an ideal jumping off point for exploring a range of rock types and formations, of interest to both novice and seasoned geologist.

On the Saturday we took in the Geoscience exhibitions and some fascinating talks about radioactive rocks and other locally important issues. The latest developments on the Jurassic coast were intriguing to say the least! (<http://jurassiccoast.org/> and <http://www.jurassica.org/>) Before dark we just had time for a walk on Sidmouth beach to look at the magnificent red Triassic cliffs, including the distinctive Otter sandstone with greenish bands more visible where recently exposed.



On the Sunday we started out on the top of an escarpment near the sweeping banks of an Iron Age hill fort, Woodbury Castle. We were high up, overlooking the Otter valley and with views across to Dartmoor (through the low clouds and mist). Beneath our feet were some exposures of the pebble beds we would later find at sea level in Budleigh Salterton. We noticed the common land we were on had mainly gorse and acid-loving vegetation, perhaps due to the rocks of the pebble beds.

We made our way in 3 cars to the lovely village of Lypstone on the River Exe, where Pleistocene pebble beds could be seen above the red

sandstone. The smooth, round pebbles contrasted with the sharp, angular rock pieces at the base of the sandstone, the latter indicative of turbulent conditions – perhaps a very sudden desert inundation – at the time of deposition.



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We enjoyed lunch at the local pub, then drove on to Orcombe Point, Exmouth. This marks the start of the Jurassic coast; the rocks dip gently to the east so that the oldest (Early Triassic) rocks are visible along this section with progressively younger rocks exposed towards the east. We were able to see successive layers of sandstones, deposited under varying geological conditions. At the base of the cliff we found a cross-bedded layer, suggesting windy desert conditions or perhaps strong floods? A healthy discussion covered the various possibilities.

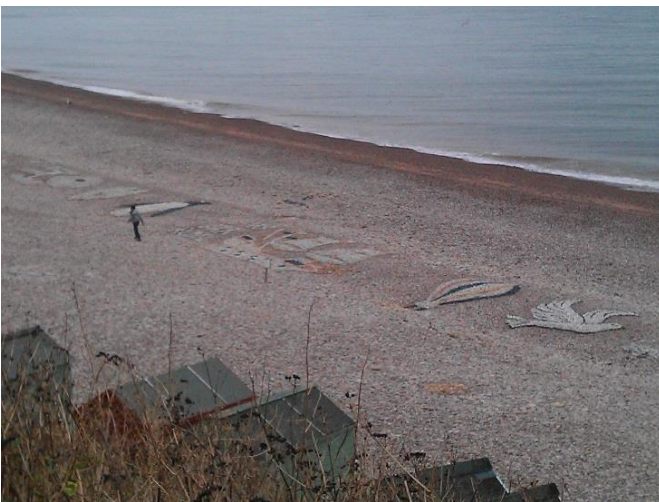


Round the point was a fault where the land had shifted by about 10 meters during some ancient earth movements.

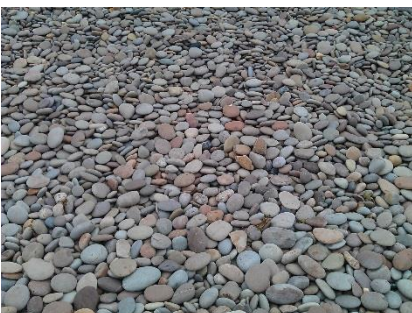
We ended the day at Budleigh Salterton, much loved by naturalists and naturists alike!

It has something for everyone:

Beach Art



Weird
natural
sculptures



BIG pebbles

and radioactive rocks
(not photographed!)

Colourful cliffs

