

A Natural History Field Visit to Great Elm



Elm Lane Bridge

The forecast for 25 April when Members of the Society visited Vallis Vale and Tedbury Camp was unsettled; perfect weather for a walk beside the Mells River, near Frome in East Mendip.

We arrived at mid-morning and set off downstream past two weirs, the first of which might have been part of a defunct ironworks, catching sight of dippers both along the river margins and flying low over the fast flowing, clean water of the river.

The de la Beche quarry face emerged before us through a clearing in the wooded Vallis Vale. The unconformity between the steeply dipping, grey Carboniferous limestone and the horizontal-bedded overlying, Jurassic oolitic limestone was clearly visible together with the unique fossils identifying each rock form; the position of these two facies comprises a unique unconformity first reported by Henry de la Beche in the 19th century.



de la Beche Quarry

On the way back to the Great Elm bridge for lunch, we passed several defunct lime kilns, spotted more dippers on the wing where the Egford brook joined the river, and some brook lamprey in the shallows of the river. The more observant of us also spotted the eggs of the Orange Tip butterfly, laid on the flowering stems of Lady's Smock.

After lunch we made our way past the working rail-line, over and along the Fordbury stream and up the steps to Tedbury Camp quarry. Standing on the level erosion surface of the quarry floor, cleared of its Jurassic oolitic overburden, we were aware of the parallel east-west inter-bedding lines of the Carboniferous limestone and the surface borings made by marine animals more than 145 million years ago.



Tedbury Camp

We were standing on an ancient sea floor on which oolitic sediment was deposited in a warm, shallow Jurassic sea creating the same unconformity that we had seen at the de la Beche quarry, similar facies and alignments. A significant north-south fault in the Quarry floor was seen not to extend into the oolitic limestone that remained around the edges of the quarry.

Brachiopod fossils were picked up in the loose oolitic stones; bivalve fossils and marine borings were seen around the unconformity surface of the two facies. We searched for evidence of rocks from between the Carboniferous and Jurassic periods without success so the question of rocks from the missing 150 million years still remains unanswered.

Having made our way back to the Great Elm bridge via a healthy population of streamside alternate-leaved golden-saxifrage, the unsettled weather closed in with a few spots of rain to wind up an enjoyable natural history day by the Mells river.



Alternate leaved Golden Saxifrage

The next Natural History field meeting is on Saturday 9 May at Great Breach Wood, meeting place to be decided; check the website for details.



Natural History Team