## Woolhope Club Field Meeting to Oxford Wednesday 9 May 2018

After picking up at Ledbury, our coach made good time to Oxford arriving at the iconic neo-gothic University Museum of Natural History at 10.30 am. A welcome coffee break was taken where our two guides Nina Morgan and Phillip Powell, were introduced by the President. We then had an opportunity to look at some of the Earth Collections notably material from the Herefordshire Silurian Lagerstätte, a unique site with its soft-bodied invertebrates, as well as extensive collections from the Much Wenlock Limestone.



A general view of Holywell Cemetery in Oxford showing the wide range of rock types used amongst the crowded gravestones. Photo taken by Nina Morgan.

Nina then took us on a short walk to the nearby Holywell Cemetery, a haven of peace and quiet in the centre of Oxford and the last resting place of the rich and famous. Opened in 1847, to replace overflowing former churchyards, the coming of the railways led to a wide variety of rocks being used in the gravestone as seen near the entrance in Plate 1. "Exotic" granites for Scotland and Cornwall joined Italian marbles, Carboniferous crinoidal limestone and Welsh or Lakeland slates to compliment the local Jurassic building stones. Using our hand lenses, we were soon able to distinguish the "semolina with shells" texture of the Portland Stone from the sugary "Kendal Mint Cake" texture of the Italian Carrara Marble.

After a very pleasant lunch at the Weston Library café, we headed out through the Bodleian courtyard and Radcliffe Square to arrive at the University Church of St.Mary the Virgin. On the way, Phillip introduced us to the intricacies of limestone identification using the key college and public buildings. We learnt that two main periods of Jurassic time produced Oxford's building stones, the Great Oolite and the younger Corallian.

Taynton stone, quarried in large quantities from the 13<sup>th</sup> to 16<sup>th</sup> centuries, of Great Oolite age is a light brown stone with denser bands of shell fragments which are

harder and more resistant to weathering giving a banded appearance. Lens-shaped bodies of finely bedded calcareous sandstone, the so-called Stonesfield slate, occur within these oolites and provided the roof tiles on the New College cloister.

The Corallian of the Upper Jurassic forms the caps of the low hills that surround Oxford and yields the contrasting white, heavily bioturbated, Headington Hard and buff-coloured Headington Freestone. The famous Radcliffe Camera shows all three of Oxford's main building stones with Headington Hard at ground level followed by ashlar of Headington Freestone. Above, the walls and columns are of Taynton Stone but now much patched with other stones.

We then returned to the Museum on foot and were able to take a break in the museum café. Now was an opportunity to see Oxfordshire dinosaurs, the Dodo and the "Red Lady of Paviland" from the Quaternary of south Wales (now identified as a man!) before we bade farewell to our two excellent guides and headed back to the Marches.

Dr Paul Olver