Geophysical Research Abstracts Vol. 16, EGU2014-16466, 2014 EGU General Assembly 2014 © Author(s) 2014. CC Attribution 3.0 License.



## Purbeck Stone - A possible Global Heritage Stone from England

Brian Marker

Independent consultant 40 Kingsdown Avenue, London, W13 9PT, United Kingdom

By definition, a Global Heritage Stone Resource (GHSR) should have international significance. The Purbeck Group of uppermost Jurassic to lowermost Cretaceous age (Tithonian- Berriasian) outcrops mainly in the Purbeck area of Dorset, England. It was deposited in shallow freshwater to brackish lagoons with occasional marine incursions. Limestones, mainly biosparites, occur at 6 main levels. Differences in bed thickness, jointing and hardness make it suitable for a variety of purposes including dimension stone, monumental and ornamental stone, roofing tiles, paving, flooring and rockery stone. Near the top of the sequence is a dark gastropod biosparite, traditionally called Purbeck Marble, easily carved, which has been extensively used for decorative interior work in churches and cathedrals particularly for fonts, tombs, flooring and facings on columns for example in the medieval cathedrals of Salisbury, Exeter, Durham, York and Wells and Worcester and Westminster Abbey. The stone was extracted at least from Roman times (1st century AD) through the medieval period. Quarrying expanded from about 1700 reaching a peak in the late 18th and 19th centuries. Stone was transported first by sea but later by rail for wider use. Used in many local buildings, it gives an important element of local character. Many of the villages are designated conservation areas with a requirement for repair, maintenance and new building using local stone. Initially the stone was taken from quarries but was later mined. The number of operating companies declined from 15 to 5 over the past 40 years, with 10 active small quarries. Outputs are from few hundred tonnes to a few thousand tonnes per annum or about 9 to 12 years of permitted reserves but the Planning Authority intends to make sufficient provision for production at recent levels for their development plan period. The extraction sites are in an Area of Outstanding Natural Beauty and close to Jurassic Coast World Heritage Site. This might be a test case for considering whether a stone with this history is significant enough to be designated as a GHSR or is, rather, of national significance.