



Nomination of the Globigerina Limestone of the Maltese Islands as a “Global Heritage Stone Resource”

JoAnn Cassar

University of Malta, Department of Conservation and Built Heritage, Malta (joann.cassar@um.edu.mt)

The Maltese Islands consist of two main islands, Malta and Gozo, as well as a small number of islets, and lie in the central Mediterranean Sea approximately 90 km south of Sicily. Although only 316 square kilometres in size, the Islands contain a rich concentration of archaeological sites and historic buildings, as well as vernacular architecture and modern buildings, for the most part built of the local Globigerina Limestone, which is one of the few natural resources of the Islands. This stone can be described as a typical "soft limestone", very easy to carve and shape. It forms part of the large family of Oligo-Miocene "soft limestones" widely diffused in the Mediterranean Basin. The Maltese Globigerina Limestone Formation is one of the main Formations, and varies in thickness from 20 to over 200 m. The material used for building is located stratigraphically in the lower part of the Globigerina Limestone Formation, called the Lower Globigerina Limestone. This Formation is stratified into thick beds at outcrop. Sections where bioturbation is concentrated often also occur. This limestone is fine-grained, yellow to pale grey in colour, almost wholly composed of the tests of globigerinid planktonic foraminifera. Petrographically, Globigerina Limestone can be described as a bioclastic packstone, with bioclastic wackestones also occurring. This limestone has always been used as the predominant building material in the Islands. The Maltese prehistoric Temples, which were constructed approximately 6000 years ago, bear testimony to this. Between 1530 and 1798 the Order of the Knights of St John built kilometres of fortifications in this same material to protect the Island from the expanding Ottoman Empire. Fortifications, impressive churches, auberges and palaces were built of this stone during this period. The capital city of Valletta, a rich and dense manifestation of Baroque architecture in Globigerina Limestone, is included on the UNESCO World Heritage List, as are the prehistoric Temples. Even today, this local building stone is still much in demand, with many modern buildings still being constructed in this material; it is also widely used for the repair and restoration of historic buildings and many local quarries are still active, with this stone even today being a keystone of the local economy. This stone is thus being nominated as a suitable “Global Heritage Stone Resource”.