
British Upper Jurassic stratigraphy (Oxfordian to Kimmeridgian)

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Foreword

There is such a diversity of rocks, minerals, fossils and landforms packed into the piece of the Earth's crust we call 'Britain', that it is difficult not to be impressed by the long, complex history of geological change to which they are testimony. But if we are to improve our understanding of the nature of the geological forces that have shaped our islands, and further unravel their history in 'deep time', we must ensure that the most scientifically important of Britain's geological localities are conserved for future generations to study, research and enjoy. Moreover, as an educational field resource and as training grounds for new generations of geologists on which to hone their skills, it is essential that such sites continue to remain available for study. The first step in achieving this goal is to identify the key sites. This is the aim of the Geological Conservation Review.

The GCR, launched in 1977, is a world-first in the systematic selection and documentation of a country's best Earth science sites. No other country has attempted such a comprehensive and systematic review of its Earth science sites on anything near the same scale. After over two decades of site evaluation and documentation, we now have an inventory of over 3000 GCR sites, selected for 100 categories covering the entire range of the geological and geomorphological features of Britain.

This volume, detailing the Oxfordian and Kimmeridgian GCR sites, is the 21st to be published in the intended 42 volume GCR series. Not only does it contain the descriptions of key localities that will be conserved for their contribution to our understanding of the Late Jurassic Epoch, but also provides an excellent summary of the succession in Britain and the considerable research that has been undertaken on it. The book will be invaluable as an essential reference book to those engaged in the study of these rocks and will provide a stimulus for further investigation. It will also be helpful to teachers and lecturers and for those people who, in one way or another, have a vested interest in the GCR sites: owners, occupiers, planners, those concerned with the practicalities of site conservation and indeed the local people for whom such sites are an environmental asset. The conservation value of the sites is mostly based on a specialist understanding of the stratigraphical, palaeontological and sedimentological features present and is therefore, of a technical nature. The account of each site ends, however, with a brief summary of the geological interest, framed in less technical language, in order to help the non-specialist. The first chapter of the volume is also aimed at a less specialist audience. This volume is

not intended to be a field guide to the sites, nor does it cover the practical problems of their ongoing conservation. Its remit is to put on record the scientific justification for conserving the sites.

This volume deals with the state of knowledge of the sites available at the time of writing, in 1998–2000, and must be seen in this context. Stratigraphy, like any other science, is an ever-developing pursuit with new discoveries being made, and existing models are subject to continual testing and modification as new data comes to light. Increased or hitherto unrecognized significance may be seen in new sites. Indeed, during the progress of the writing work, three new sites have been proposed for the Oxfordian and Kimmeridgian GCR lists, and it is possible that further sites worthy of conservation will be identified in future years. Nevertheless, there is still much more to learn and the sites described in this book are as important today as they have ever been in increasing our knowledge and understanding of the Late Jurassic history of Britain. This account clearly demonstrates the value of British sites for Upper Jurassic stratigraphy, and their important place in Britain's scientific and natural heritage. This, after all, is the *raison d'être* of the GCR Series of publications.

N.V. Ellis, GCR Publications Manager November 2000

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