

Geodiversity Review

Project Information Sheet

UK Geodiversity Review

Following the GeoValue project completed in 2007, and the Geodiversity Audits of Quarries in Devon and Somerset, a ‘state of knowledge’ review of Geodiversity in the UK has been undertaken and completed. It is the fifth ALSF research project award to David Roche GeoConsulting funded through the MIST programme managed by MIRO.

Professor Peter Scott is lead author of the report with input from David Roche and Clive Nicholas, and also from David Lawrence and Keith Ambrose of the British Geological Survey. This forms part of the current dissemination phase for all the ALSF projects – for details see www.sustainableaggregates.co.uk.

The review discusses the research and other activities involving geodiversity undertaken in the past few decades in Great Britain, particularly the projects supported by the Aggregate Levy Sustainability Fund (ALSF) through the Minerals Industry Sustainable Technology (MIST) and Sustainable Land-Won and Marine Dredged Aggregate Minerals Programmes (SAMP).

Natural England, Scottish Natural Heritage, the Countryside Council for Wales, the Joint National Committee for Nature Conservation (JNCC) are involved with geodiversity and geoconservation at the national level, including the designation, documentation and maintenance of Sites of Special Scientific Interest (SSSI). Work in geodiversity also takes place at the British Geological Survey. There are many county-based groups including those establishing Regionally Important Geological and Geomorphological Sites (RIGS), geology trusts and others, promoting geodiversity and geoconservation. Their activities have expanded considerably in recent years as a consequence of support from ALSF, mostly through English Nature grants, and include:

- designation of RIGS
- conservation of geological sites
- preparation of geodiversity action plans
- information boards at important sites
- development of geological trails

Reviews of existing projects and future work



*Trias mudstones on granite at Croft Quarry, Leicestershire
Folded limestones at Westleigh Quarry, Devon*



- leading field excursions
- holding rock and fossil roadshows
- education at all levels, and
- general promotion of geodiversity through publication of literature.

recommendations are listed on page 2 >>>>

Existing projects have developed methodologies and procedures for recognising and managing geodiversity through demonstration in several areas of England, including:

- Comprehensive geodiversity audits at active aggregate quarries (Devon and Somerset)
- Preparation of a geodiversity audit prior to development of a geodiversity action plan, along with some implementation (eg in Durham, Leicestershire and Rutland, Gloucestershire Cotswolds, Northumberland National Park)
- Production and publication of attractive materials promoting geodiversity using different media (published books, DVD, internet sites) (eg for Charnwood Forest, Mendips, The Peak District, Hadrian's Wall)
- Establishing procedures for the development of geodiversity action plans by aggregate companies, known as cGAPs
- Development of a procedure for assessing the value of geodiversity at a geological site
- Assessing the issues associated with gaining access and safety at geological sites, particularly quarries

Future work in geodiversity should be directed towards:

- Addressing the uneven geographical distribution in developing knowledge, understanding and promotion of geodiversity by undertaking work in areas of Britain which have so far lacked activity
- Supporting the undertaking of a geodiversity audit as an essential pre-requisite to a geodiversity action plan
- Further promoting of geodiversity within local and national government so that future policy documents give geodiversity equal importance with biodiversity
- Promoting geodiversity so that it is represented professionally in local government.
- Creating an ALSF land fund to purchase/manage key geological sites
- Creating a national database of RIGS and county geology sites in parallel with SSSIs
- Engaging with smaller aggregate companies and other sectors of the extractive industry to encourage them to develop geodiversity action plans
- Undertaking further research to assess the economic and social value of geodiversity
- Encouraging open discussion of the need for a national geodiversity action plan, and its aims, objectives and status
- Considering the scope for development of work on the geodiversity of soils, including its relationship with geoarchaeology



Major angular unconformity with Middle Jurassic Inferior Oolite limestones overlying steeper dipping and folded Carboniferous Limestone at Colemans Quarry, Somerset