

Update No 12: Autumn (Sept) 2021



Working in partnership with Somerset Environmental Records Centre (SERC) and Somerset Wildlife Trust (SWT) to encourage appreciation, conservation and promotion of the geology of Somerset <http://wp.somerc.co.uk/specialist-groups/somerset-geology-group/>

Dear all

We had hoped back in the spring, to organise a Somerset Geology Group (SGG) get-together this autumn and indeed, following our April *Update* (mentioning a provisional date of Mon 11 Oct 2021), we did start to explore venues or on-line options.

However, over the summer it has become clear that Garry Dawson and myself, as SGG co-coordinators, need to focus all our effort this autumn (and for the rest of this financial year), in tandem with Wesley Harris (Wes), the 2-day per week Local Geology Sites (LGS) Project Officer at SERC, on our joint project to review Somerset's LGS - as funding for Wes' temporary post will finish at the end of March 2022.

Please note therefore that there will be **no SGG get-together this autumn**. Once we have completed the LGS review next spring, we will start to look at options for a SGG get-together in autumn 2022. The next *Update* may also be later than April 2022, in order for us to be able to confirm a date and preliminary arrangements.

We hope that we will be able to organise a way next year to share what everyone is doing; to look at the priorities and opportunities emerging from the LGS review; and consider together what SGG might best focus on over the next few years. In the meantime, we hope this *Update* will provide a flavour of recent progress with the LGS review project.

South Somerset

Our efforts are currently focused on South Somerset. We were able to report good interim progress to South Somerset District Council Community Fund in May, after the LGS Panel had reconfirmed the first 17 of the 50 LGS in South Somerset in April and we had submitted the finalised form for the Ham Hill LGS to Rachael Whaites, the Manager of Ham Hill Country Park.

The LGS Project Officer role is critical to completing the project, so we were also very pleased to hear in July that SERC will now definitely be able to extend Wes' contract for the full financial year.

Our team of SGG-sourced SERC volunteers has also continued to make great progress, with a number of site visits carried out over the summer and forms now being completed, to bring forward as many as possible to the next LGS Panel in November. This is the second summer when we have been without the assistance of SERC-based graduate volunteers, as originally planned.

Many LGS can appear disappointing on first inspection in the field. Some are, for example, small old quarries on private land with limited exposure; or they may be a cutting on a road with heavy traffic and no verge.

However, together with the 12 nationally important Geological Conservation Review (GCR) sites in South Somerset (which are all earth science SSSIs), the LGS provide a glimpse into the geology beneath the district. The overall geology of South Somerset is in fact broadly similar to that on the Jurassic Coast World Heritage Site, but with the rocks mostly hidden beneath superficial deposits, soils and vegetation! Desk research can also reveal an interesting story of research, including by early geologists.

For example, the late Triassic Penarth Group (former Rhaetic) and Lower Jurassic Blue Lias Formation represent a major change to marine conditions from the underlying red strata of the Permo-Triassic. LGS in South Somerset provide a glimpse into this marine transgression between the outstanding and nationally important exposures for this interest on the Somerset coast, in the Watchet area, and those further east in the Mendips, where shore-line conditions prevailed.

Another example is that of the Mid-Jurassic Inferior Oolite (IO) Formation. We are in the midst of reviewing the 10 LGS in South Somerset

for this Formation and are grateful to national expert, Robert Chandler, who is helping us with information on those sites that he knows.

This Formation has been researched over many years in the Wessex area, with a detailed series of time zones developed, based on its fossils. The IO LGS complement the GCR sites in South Somerset and Dorset for this interest and provide a glimpse into the variation across the Wessex marine basin at that time, with different zones, thicknesses and sedimentary layers present from place to place. They also include quarries for some locally distinctive building stones.

Other LGS illustrate how important geology can be in influencing local scenery. This includes those which are sections in the siliceous sands of the Lower Jurassic Bridport Sands Formation. They are exposed in sunk lanes, which create a distinctive landscape unique to these parts of South Somerset and Dorset.

Ham Hill - The Ham Hill Limestone Formation is even more localised. It is a calcareous shell-based sand, deposited within the Bridport Sand Formation, and is unique within the Lower Jurassic of Britain. Ham Hill has both GCR and LGS designations and is emerging as the geological 'star' of South Somerset in terms of conservation importance. The strata are visible and accessible in the Country Park, with facilities close to hand, and in addition to its scientific interest *per se*, there are many related stories that could potentially be told, for example, on the quarrying history and visits by early geologists. Our LGS review has been timed to help with the Country Park's current work to develop a second-stage Lottery bid.

Mendips

Wes has spent a good proportion of his time over the last few months catching up on post-Panel processing for those LGS in the Mendip batch already reconfirmed by the Panel. We have also been considering boundary adjustments for a few last LGS in this batch before the next LGS Panel meeting in November.

Precautionary approach - LGS can be of local to

SGG is a member of **GeoConservationUK** (<https://geoconservationuk.org/>) which *encourages the appreciation, conservation & promotion of local/regional geological and geomorphological sites for education & public benefit*. We also aim to encourage delivery in Somerset of the UK Geodiversity Action Plan www.ukgap.org.uk and England Geodiversity Charter www.englishgeodiversityforum.org. Previous *Updates* are available at <http://wp.somerc.co.uk/specialist-groups/somerset-geology-group/>.

regional interest, and the LGS Panel has adopted a robust but precautionary approach, especially where review has been only possible by desk study. Only a few of the original selection of LGS in the 1990s (then RIGS) have therefore been recommended for de-designation.

Nationally important sites - When our LGS review is complete we will have a much sounder basis on which to consider future priorities and opportunities for geo-conservation projects and related activities in Somerset – alongside the needs, of course, of the c 60 nationally important GCR sites in Somerset, which are all either earth science SSSIs or within wider biological SSSIs.

Thanks - Our thanks to all who have, and are, assisting with the LGS review: with funding, volunteer time; and other help.

Events - There still appears to be much uncertainty as to what field and/or on-line geo-events in Somerset may take place over this coming winter, so we simply include the main relevant links below.

Wendy Lutley, Coordinator

- **Proposed International Geodiversity Day** – currently being proposed within UNESCO - www.geodiversityday.org/
- **Earth Science Week** - www.geolsoc.org.uk/earthscienceweek - a week in October co-ordinated by the Geological Society of London.
- **GeoWeek** - www.geoweek.org.uk - a week of activities in early May co-ordinated by the Earth Science Education Forum.
- **Mendip Rocks Festival** – www.mendiphillsaonb.org.uk/events/ or www.earthsciencecentre.org.uk/mendip-rocks - events usually summer to autumn
- **South West Open University Geological Society (SW OUGS)** - see <https://ougs.org/events/>
- **Somerset Archaeological and Natural History Society (SANHS)** - www.sanhs.org/
- Graeme Churchard's events calendar <http://westcountrygeology.com/>
- **Geologists' Association's** national website - <https://geologistsassociation.org.uk/>

NB This list is not intended to be comprehensive.