

## **Somerset LGS project – Report for Year 1 (April 2017- March 2018)**

This report covers the first of our three year joint project with Somerset Environmental Record Centre (SERC) to review Somerset's c existing 230 Local Geological Sites (LGSs). Considerable preparation work had also been achieved in 2016/2017.

*Our thanks to everyone who has assisted this year: with funding, help in-kind, advice, expertise and voluntary time; and to our partner organisation SERC. Our progress would not have been possible without all this help - especially the considerable number of volunteer days contributed by our SERC-based student volunteers and SGG members.*

### **Sites surveyed and developing our *modus operandi***

During the year our SERC-based student volunteers carried out site visits to survey, monitor and add this information to our assessment forms, for c 65 of the c 230 LGS in Somerset, with assistance of two main SGG mentors (who were also signed up as SERC volunteers). Most of this activity took place over summer and early autumn 2017 and was focused on the western part of Somerset, particularly Exmoor National Park (ENP). It included advance preparation for the site visits by summarising information from the existing SERC site files and adding a map with the site boundary to our new forms. This was a substantive body of work involving many volunteer hours: our student volunteers and their mentors have done a great job in pioneering this first season of site visits and form completion.

It has given us a great deal of practical experience to learn from, with this first year essentially becoming an extended pilot. Over the winter we have needed to review progress to develop our *modus operandi* and ensure that we have a system that is 'fit for purpose', i.e. both practical and rigorous for the next stages of the project.

It emerged that if the forms were to be completed with the full desk work ideally needed, it took, on average, a total of two days, rather than the one-day-per-site originally estimated. Also permission from landowners for the site visits came back in a 'patchy' way, so we found we had incomplete coverage for batches of sites for individual geological formations. This meant that in many instances we would not yet be able to fully address the key questions of our methodology, to avoid, for example, duplication of sites of similar interest.

Over the winter we:

- adjusted our form to streamline it, reduce repetition and bring summary information to the first page for ease-of-use by future users such as members of our proposed Somerset LGS Panel;
- developed model examples of completed forms, including example wording for the final summary statement that will be on the first page;
- agreed a lighter-touch approach, so that mentors and other experts can add their expertise to a site form in a less onerous way if wished (to the summary part only);

- developed a first iteration of the ‘working report’ for Exmoor and the Quantocks, to provide an example of the additional desk information ideally needed:
  - on any adjacent LGSs across county boundaries;
  - on relevant national Geological Conservation Review sites;
  - to map and analyse sites for individual local geological formations to avoid duplication of sites of similar interest;
  - to provide an update on the geological context since the sites were first identified from any more recent geological research;
  - to identify gaps and potential new sites for future consideration.

We reviewed the situation, in both SGG Coordinating Group and LGS Steering Group meetings, to agree what might be ‘sufficient’ to take sites forward to the proposed LGS Panel for formal reconfirmation or otherwise. We now envisage a two stage process. Firstly, when ‘sufficient’ information is gathered with site survey, initial completion of the form and sign off by a mentor, sites will be put forward to the proposed panel for reconfirmation or otherwise. A further phase of work (contextual information from the relevant working report and additional input from experts) will provide further evidence base. In some cases, sites may need to be put ‘on-hold’ pending that fuller information becoming available.

We now envisage that a first batch of sites will go to the proposed county LGS Panel (which will be organised by SERC to parallel that for its Local Wildlife Sites) in summer 2018, in tandem with site survey work continuing for our second season. Completing the site visits for the county as a whole will take longer than originally envisaged, but we hope that the bulk of sites will be at least visited in the three-years originally envisaged for the project.

We give further detail below - to pass on our learning in case useful for others.

**Funding** – We had already been successful in our joint application to the Curry Fund of the Geologists’ Association (GA) for grant aid to assist the project in January 2017 and had secured sponsorship from geological consultancy Geckoella in 2016/7. This year we were successful in gaining a grant for the project from a joint application to the Pat Hill Cottingham Memorial Fund of the Somerset Archaeological and Natural History Society (SANHS). SGG contacts also assisted SERC in securing support from the ENP Authority and the Quantocks Area of Outstanding Natural Beauty (AONB), as part of their service agreements with SERC. SERC is managing financial aspects of the project, including any funds raised, and this support means it has been able to cover travel expenses for SERC volunteers for the site visits during the year. SGG input has been entirely voluntary, including assisting with securing grant aid and help-in-kind.

**Help-in-kind and SGG meetings** – SGG has also received help-in-kind from the Alfred Gillett Trust in Street and Somerset Earth Science Centre (SESC) in the Mendips for hosting meetings of our SGG network (in May and October 2017, respectively). These were held to help revitalise SGG, explain the project, build voluntary support for it and contribute to

induction of potential volunteers. The first meeting included an introduction to the situation nationally from Lesley Dunlop of GeoConservationUK (formerly UKRIGs), our national coordinating group. The latter included an introduction and partial induction to our methodology and a site visit to Tedbury Camp LGS in the Mendips (advertised and organised as part of the Mendips Rocks Festival 2017, with the assistance of Adel Avery from our LGS project steering group). The latter was led by Peter Hardy, local geologist and earth science teacher, assisted by Alan Holiday, chair of our equivalent group in Dorset. All attended or assisted as help-in-kind and the second meeting provided the opportunity to develop contacts with potential mentors and experts willing to assist in rolling out the project in the eastern part of county. Details of these meetings were circulated via two mailings of our SGG e-group (c 45 strong), with c 15 members attending the first and 18 the second.

### **Student volunteers**

Garry Dawson, joint co-ordinator for our SGG group, organised an e-mailing to university geology departments before Easter 2017 to advertise for student-volunteers. Two SERC-based volunteer student placements (c 3 days per week) were arranged for the summer, following interviews arranged by SERC via Skype. James Voysey (then a second year student at University of Plymouth) helped from mid-July to mid-September and Hugh Galloway (finishing from Plymouth and due to start an MSc at Cardiff) from mid-July to mid-October, joined for a few days in the autumn by Connor Allen.

SERC also undertook a gap-year placement for Elliott McConnell, also a student at University of Plymouth, between October to March, involving a range of experience - not simply work on the LGS project, with for example, 11 trainee days hosted by SESC as help-in-kind.

Garry and Phil Parker of our SGG group acted as volunteer mentors, with knowledge of the geology of Exmoor and the Quantocks respectively, while Doug Robinson joined us in the autumn as a volunteer mentor in the Mendip area. Derrick Reid, assisted as a volunteer with Exmoor, including contributing advice for SERC's generic risk assessment for the project site visits. We were able to contribute information to assist with this too from guidelines for the Open University Geology Society's field trips and the GA Geological Code of Conduct.

This was very much a first year and we are planning to develop our induction for 2018, but we hope our student volunteers for 2017 will have benefited from a range of experience and learning outcomes. They are now aware, not only of LGSs, but also, for example, of the the system of nationally important Geological Conservation Review (GCR) sites, designated as Sites of Special Scientific Interest.

### **SGG organisation and volunteers**

SGG was originally established by the Somerset Wildlife Trust (SWT) in the 1980s and had been regarded as part of it, but during the year it emerged that SWT's specialist groups were now regarded as separate independent groups. Three of us met with the chief

executive of SWT in summer 2017 to explore the issue - as the change had occurred in the years when our group was inactive.

Wendy Lutley, SGG Coordinator, researched how similar geology groups in other counties are variously organised and our SGG Working Group, established in 2016, developed a draft paper to update our SGG 'terms of reference' which was agreed at our October 2017 meeting. It clarifies that we are separate from SWT and remain as an informal network, while the five original Working group members now form the SGG Coordinating Group. We would need the capacity to have, for example, a treasurer and policies on health and safety if we were to become a more formal group. Remaining a network seems a more sustainable approach in the current situation.

We were able to establish with SERC (which is part of SWT) that SGG members could become volunteers for SERC, and therefore covered by its volunteer insurance, where they were willing to take on a substantial amount of voluntary work to survey a batch of sites for the project and go through appropriate induction. We have two volunteers now who have undertaken to survey a batch of circa 10 sites each for SERC in this way - and our project mentors have also become SERC volunteers. Our updated 'terms of reference' clarifies that otherwise anyone attending a site visit does so at their own risk. We are not involved at present in practical conservation work, but have benefited for several years from practical conservation work at Tedbury Camp LGS by our equivalent Dorset group (which has appropriate insurance for such activity).

Many other SGG members have offered to contribute their geological expertise, and we anticipate that this will mostly now be incorporated at later stages of the project, once, for example, we have a batch of site forms for a particular geological horizon or interest, that we can send to an expert to review or add their knowledge (some of our SGG network experts are not necessarily resident in Somerset).

Our SGG Coordinating group includes David Hill and Peter Wright, who have assisted with chairing SGG meetings and the LGS project steering group respectively, Garry and Phil, who, as above, have pioneered the mentor role in the first season of the LGS project, while Garry has also worked with Wendy, as a co-coordinator to share the tasks of SGG and LGS project organisation. Our LGS project Working group therefore now effectively consists of an extended network of: Coordinating group and additional mentors and other volunteers.

### **Our form, the criteria and methodology**

We made final adjustments to our draft form and associated guidance in advance of practical work commencing in summer 2017, based on comments received from Andy King as help-in-kind in 2016/7. At the end of this first year however, the length and repetition in our form is still causing some concern, including from mentors. We need to look at whether we can streamline it a little further, while still keeping the methodology to achieve a

consistent data set. We need to make sure that everyone understands that many questions in Section B are simply an *aide memoire* to gathering information for the key questions: and it's fine to put '*not fully researched*' and '*see above*'.

We have also agreed that we will prioritise gathering information for the *scientific* and *education* criteria (including information on access) for first phase input, while some *historic* and *aesthetic* criteria information may not be essential and can be added later if desirable. We have agreed that volunteers should be encouraged to use the form in the field at least on initial site visits (as the headings act as a checklist), whilst recognising that some may prefer to use their learnt geological fieldwork methodology of a field notebook. We also need to make sure that volunteers and mentors are provided with the existing site file and site boundary map as a start point.

Other 'tips' have been incorporated into a 2018 addendum to our volunteer Guidance. For example, a more detailed briefing is required on taking monitoring photos to record the current condition of the sites, while we need to be able to email the form to the mentor and other SGG experts contributing (with some photos therefore held on a separate file).

### **Partnership working**

The project is a new partnership for SERC and SGG and we are all learning how to work together, as well as think through how to develop the project. The steering group was established in the preparatory year and it and SGG mentors are proving invaluable to advise on the way forward. We held project steering group meetings in June and Nov 2017 and February 2018. We needed more than the two meetings envisaged in this first year.

The master project planning spreadsheet (developed by Garry Dawson for SERC) with columns for landowner permission granted, site visit made, etc.) is working well and we have added a new column for 'out for additional desk input'. Our shared G drive, also developed by Garry, is proving useful for sharing site forms. Phil compiled a list of recommended nomenclature for the geological formations likely to be encountered in our first field season. Garry and more recently Doug have been assisting with developing ways in which key volunteers can share interactive GIS information, beyond the main GIS system held by SERC. Garry also organised a site visit induction at King's Cliff Quarries for potential SGG members to become SERC volunteers in the western part of the county in October.

Particular learning points are:

- **Landowner permissions** – we need to ask SERC if it is able to activate its permission letter to landowners well before any student or other volunteer site visits are planned. Plus, where there is no reply, we need to agree a cut-off date when our new site form will be completed from what information is available without site visit.

- **Programming** - ideally a batch of sites for a geological formation should be allocated to an individual student or other volunteer, to assist with 'reading-up' in advance of the site visit and identifying any duplication of interest.
- We need to be clearer between SERC and ourselves re **who-does-what** and improve our communication between steering group meetings - including looking at how things will work when the focus moves to the eastern part of the county and mentors are further from SERC's Taunton office base.
- An important aspect is the need to **plan well in advance**: SGG members are often retired and with other voluntary commitments, so getting dates for mentoring and other meetings in diaries well in advance is proving vital.

SGG volunteer time to assist with coordination is considerable and has been running at c 2 days per week over the last year, as well as the mentor time. A project of this scale has potential for a paid in-house role: to lead on coordination; ensure relevant SGG experts are contacted; organise induction, sharing sessions and mentoring and ensure day-to-day supervision of student and other volunteers, etc. We would suggest that future similar projects elsewhere might explore funding from sources such as the Heritage Lottery Fund, or secondments from other organisations, to assist with this.

### **Contact with planners**

Sarah Povall of Somerset County Council (SCC) Planning Department arranged a slot for us at a September meeting of strategic planners in Somerset, to introduce the project to all the strategic planning authorities in the county. Sarah has now joined our steering group, replacing former SCC planner, Guy Robinson, who assisted with planning advice in 2016/17.

### **Interpretive material and wider geo-diversity interest**

Considerable scope is already emerging for information on LGS's to contribute to interpretive material and in some cases there is potential for wider landscape-scale geo-diversity projects. These types of opportunity have been flagged up in the first iteration of our working report for Exmoor and the Quantocks. We have, for example, already advised Wessex Water on text for a geological interpretive panel planned for its Clatworthy Reservoir LGS. Two LGSs in the Exe Valley have also emerged as having history of earth science interest for their contribution to late 1800s investigations on radiolarian chert.

Our form will allow analysis for sites within the different strategic National Character Areas for landscape in Somerset, but it has emerged that the boundaries of these do not coincide fully with the underlying geology. Over the summer we also explored whether it was feasible for student volunteers to add information to our site forms from, for example, the more detailed level Exmoor Landscape Character Assessment under the *Aesthetic* section.

This proved beyond the scope of this project, but may be useful in the future in some cases for potential geo-diversity and/or interpretative projects.

Pamela Morris, Senior Landscape Officer for ENP and a member of our steering group, carried out site visits with Phil and Derrick in the autumn to two sites of known interest on Exmoor for their *Aesthetic* value. She is also carrying out additional desk-based reviews and research for a further five LGSs sites surveyed in the summer, selected to have quarries and/or archaeological interest, to assess what additional information might be available in relation to geo-diversity and their *Historic* landscape interest. Again research at this level of detail has proved beyond the scope of this project, but we want to assess its potential for the future, especially in relation to wider landscape conservation and interpretive projects.

### **Coordination with adjacent counties**

ENP Authority needs to have consistent cover across the national park as a whole, which extends into Devon. We therefore liaised during the year with the chairman of our equivalent grouping Devon and, in the absence of any active Devon expert on Exmoor, have undertaken to provide a consistent data set across the ENP as part of this project. The LGSs in the Devon part of the ENP were in fact originally identified for ENP by the late Hugh Prudden, former secretary of SGG. We carried out a preliminary desk analysis of these sites this year – and it has emerged that several may now be superseded by GCR designation.

We have established cross-border contacts for the Blackdown Hills AONB and looked at examples of the original 1990s Devon 'RIGs' reports. Keith Moore, involved with the Devon assessment group in then, but now resident in Somerset, has joined our steering group and will assist as a volunteer geological expert on the proposed LGS Panel. We have had regular contact with our equivalent group in Dorset and made contact with the Wilts group.

### **Plans for 2018/19**

At our steering group meeting in Feb 2018 we were able to thank Paula Hewitson, SERC's manager, for her courage and enthusiasm in getting the project started – she moved to a new job at the month end. We very much appreciate SERC's input to the project and are currently looking forward to meeting Paula's successor to finalise plans for 2018.

We hope to advertise for student volunteers soon after the Easter holiday, as per 2017. We have agreed that we need to prioritise further essential 'sufficient' desk work for those sites surveyed in 2017 and site visits to 'fill the gaps' to complete coverage for Exmoor and the Quantocks and then the Vale of Taunton Deane. If any particular opportunities arise too, we will want to further progress work started in the Mendips/eastern part of Somerset.

We need to develop our induction for new volunteers and mentors for 2018 to include elements piloted in autumn 2017:

- PowerPoint introduction to LGSs, the project, our methodology and the form;

- site visit with the form;
- agreeing allocation of sites and talking about priorities;
- follow-up sharing sessions to ensure forms are being completed appropriately and to help in developing the summary wording;
- ideally input from those with different expertise, such as on interpretative material;
- agreeing who will provide any contextual information (on GCR sites etc.) and make contact with any experts - or whether this will be done later.

We hope to hold a first Panel meeting in summer 2018 and thereafter will need to progress regular Panel meetings (SERC will be responsible for organising these). Bob Corns, on our steering group for Natural England (NE), has provided a useful short checklist to assist with what should be 'sufficient' evidence for the Panel. This has helped to simplify understanding and prioritise from the more comprehensive key questions on our form (derived from those used in recent years in Cambridgeshire and Essex, and drawn to our attention as latest best practise by Jonathan Larwood of NE nationally in our preparatory year).

We need to continue to ensure that we all – partners, volunteers, mentors, steering group and panel members - develop a common and mutually agreed understanding of our project, its *modus operandi* and assessment methodology, so continued discussion remains essential. Other county LGS groups elsewhere in the country may, of course, find that different working arrangements and partnerships are more appropriate to their needs and circumstances, but we hope this report may prove useful to others.

Wendy Lutley, Coordinator  
Somerset Geology Group, March 2018

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