



The Geological Society

servicing science & profession

About

- **Dr Maxine Smith**, Online Development Editor, Geological Society of London
- The Geological Society of London (GSL) is a not-for-profit organization, and a registered charity. Its mission is to improve knowledge and understanding of the Earth, to promote Earth science education and awareness, and to promote professional excellence and ethical standards in the work of Earth scientists, for the public good. It is the oldest geological society in the world founded in 1807.
- The Society is the UK's professional body for Earth science and has a worldwide membership exceeding 12,000. More than 2,000 of its members live overseas and more than 2,500 are Chartered Geologists or Chartered Scientists – professionals who have demonstrated a high level of education, professional competence in their field and a commitment to professional ethics.
- The Geological Society Publishing House is a global leader in Earth sciences publishing and is dedicated to providing a high-quality service to Earth scientists worldwide. The Society publishes a diverse range of books and journals, with more than 10,000 pages of new peer-reviewed geoscience literature made available every year. The Lyell Collection at www.lyellcollection.org hosts the Society's journal titles, Special Publications and key book series.

An online profile for all the research outputs of the world's leading geological society

The Geological Society of London needs to keep up with funder mandates and relevant new technologies for their community of researchers and members. "We are looking to select new technologies that will be helpful for our readers and authors, and that will offer the greatest return on investment," says Dr Maxine Smith, Online Development Editor.

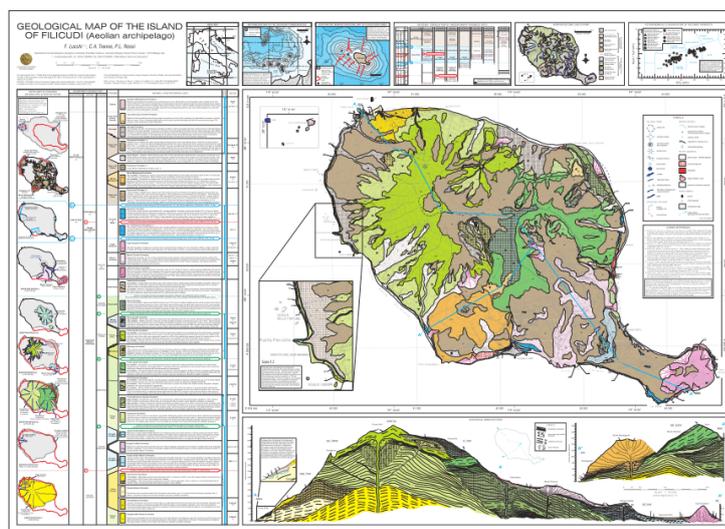
The Society is a prestigious organization, but lacks internal technical scale. As an important not-for-profit publisher within a niche, the Society requires a range of strong external relationships in order to deliver the standards and services rightly expected by the community it serves.

Maxine's mandate

Maxine's main focus is on the online development and maintenance of the Society's online platform, the Lyell Collection (<http://lyellcollection.org>), and collecting and implementing new ideas to ensure the platform will better serve the needs of the users. The broader editorial group within the Society discusses development options and Maxine is then responsible for rolling out these new features. Maxine's remit also runs to the testing of these new services on the platform. The Lyell Collection is hosted by Highwire - they do the technical implementation and Maxine translates the business and editorial requirements to them. Maxine also works with GeoScienceWorld (GSW) – a not-for-profit Earth sciences web resource - that hosts Geological Society of London content along with that of 28 other publishers. Maxine also prepares content for publication in GSW's eBook Collection.

The Lyell Collection hosts seven current journals and four archive journals, (the same seven journals are also hosted on the GSW platform). In addition to journal content the Society also includes four successful book series as part of the Lyell Collection.

cont.



As visualized by figshare: Volcanism, magmatism, volcano-tectonics and sea-level fluctuations in the geological history of Filicudi (western Aeolian archipelago)



Dr Maxine Smith and the Publishing House team

Goals

- To reduce operational burden and better manage supplemental and “homeless data” for Geological Society of London authors.

Approach

- Deploy a figshare custom portal to host and visualize supplementary data and “homeless” data for Geological Society of London authors.

Results

- Has enabled the deposit of data and hosting of authors’ supplementary materials with DOIs and metadata. This makes the data citable and searchable, indexed by Google, and helps keep Geological Society of London in line with community expectations and standards.
- As a result of the implementation of figshare as a research data management solution, two staff were freed up from burdensome data management tasks
- Selecting figshare has also led to the adoption of a new publication data policy by the Geological Society.
- Long-term preservation of Society data has been assured with figshare joining the Digital Preservation Network (<http://dpn.org>).

For more information on Digital Science Publisher Solutions email publishers@digital-science.com

The challenge

Since 2007, the Society had been hosting supplemental data from their authors on its own website. “The supplemental data was there and available,” says Maxine “but we had to do the manual work of hosting the data and finding the storage space. The data did not have digital object identifiers (DOIs), but we were keen for the data to have their own identifiers, and so our main aim was to ensure that each piece of supplemental data was more discoverable and citable.” The IT department was providing Maxine and her colleagues with technical support and server space, and a designer in the marketing department was spending time reformatting files. In addition, a publishing assistant spent considerable time manually uploading supplemental data files to the online platform. “These two members of staff were very pleased when we explained that we were going to migrate to a service with figshare,” says Maxine.

Review of the options available

When Maxine and her team looked at the options for supplemental data management offered as a software service, figshare and one other provider were identified as the most feasible options and a comparison of the features offered was undertaken. They also looked at cost and how the sites were structured. “figshare’s strength is that it looks beyond the journal,” says Maxine. “Although you could still use the journal code to locate the supplemental data, a figshare custom portal allows us to offer a research output portal for the Geological Society. We could ensure that the Society would be very visible to the user, and not just the individual brand of the journal.” The team has also been impressed with Taylor & Francis’ custom portal from figshare (<https://tandf.figshare.com/>). “We liked it and so we waited for the figshare code base merge which took place at the end of 2015, before taking on figshare for ourselves,” she says.

Full launch

Geological Society of London did a public launch in mid-January 2016 with a base of 10 data sets, since then authors have been actively adding supplementary data. “The frequency of supplemental data publication varies depending on the journal,” Maxine comments. Seven journals and one book series had their supplemental data stored and visualized on the figshare custom portal.

Unusual file types

Maxine adds that support for Google Earth files in figshare is also very useful. “We have two to three Ply files, which are read through special 3D imaging software,” she says. “These are unusual files and you need very specific reader software to read them. The user can download them from figshare and open them in a 3D meshing software, which can be downloaded for free if necessary.”

Feedback from editors is that they are very pleased with the way their files are presented in the figshare custom portal.

cont.

“figshare’s strength is that it looks beyond the journal, and although you could still use the journal code to locate the supplemental data, a figshare custom portal allows us to offer a research output portal for the Geological Society. We could ensure that the Society would be very visible to the user, and not just the individual brand of the journal.”



*As visualized by figshare:
Bathy-morphological setting
of the Aeolian Islands*

Experts there when you need them

Maxine was also very impressed by the responsiveness and advice given by the figshare team, especially the founder Mark Hahnel. “If you are starting a relationship with a new supplier, you want your questions to be answered,” she comments. “You want to be reassured that there will be somebody there if you really need to get advice and support quickly.”

Developed data policy

Maxine has also developed a data policy, but not one that forces authors to comply with it, but rather acts as an advice note to authors on the ways in which they could manage their data.

The United Kingdom is leading the way in data policy development. Maxine looked at the most relevant publisher data policies available in order to create a policy for Geological Society of London. Maxine stresses that there is no mandate from Geological Society of London to publish data in any specific way. She says “We need to take an approach which accommodates authors who have commercial restrictions on how they can share their data, so we want to respect that and not be seen to be enforcing our policy. We now also have a lot more flexibility in terms of the range of file types that we can accept and we outline that clearly in our policy.”

Usage of supplemental data

Maxine is happy as long as there is some use of the supplemental data. “With figshare, you can easily see the views and downloads of the data,” she says. “Previously, we couldn’t see any of those engagement statistics.”

Future direction

Maxine has a busy year ahead with a new site set up project, and she and her team are also looking at embedding Altmetric badges into the Lyell Collection. Geological Society of London’s journal and book content has also been indexed in ReadCube Discover to help increase discoverability and reach, and they are also looking at working with CrossMark and FundRef.

A home for “homeless” data

Many of Geological Society of London’s authors are funded by major funding bodies, and are directed to deposit their data on NERC or the BGS data archive. Other authors who are not funded in this way nevertheless need a home for all their data. Maxine sees the figshare portal as providing that home. “We want to encourage data sharing,” she says. “We see this portal as a way to promote this.”

Maxine has received positive feedback from the community on the portal so far.

For more information on Digital
Science Publisher Solutions email
publishers@digital-science.com