

The Scottish Geology Trust

Melvyn Giles issues a call to arms for Scotland's geoheritage

From a geological point of view, Scotland is something of a superstar. Whether you view it from the development of the science, the range of rocks and processes preserved, the stunning scenery, the quality of the universities or its contribution to the economy and history, Scotland's geology is fundamentally important.

Scotland's past, present and future are intimately linked to geology. The beauty of the country stems from its long geological history, which includes continental collisions raising mountain chains of Himalayan proportions, meteor impacts, rifting, volcanism and glaciation. It is truly a land of ice and fire. The country's prosperity—past and present—is largely or partly derived from its geology. Today most of Scotland's primary industries, including the renewable energy, agricultural, life sciences, oil and gas, mining, forestry, tourism, environmental protection and even the whisky industries, all rely on an understanding of the physical

processes operating on our planet.

Geological malaise

In the land of Hutton, Lyell, Hugh Miller and many other famous geologists, it is surprising that so little is generally known about the importance of the Earth sciences. Few of the many visitors to the Highlands who marvel at the landscape know much of the reasons why it exists or how it came about. Within the pre-university education system, mention of geology by name is rare, and our young people don't aspire to work as geologists. The future impacts of this on our workforce are concerning.

Rather than being celebrated for its value to landscape, industry and culture, geology has become tainted in many people's minds by its connection to the extractive industries. The importance of geology for securing the resources needed for renewables such as geothermal power and technologies that require lithium and other rare metals is overlooked. Crucially, knowledge of the physical processes that make our planet work are fundamental to understanding issues of climate change and to the management of geohazards.

Key conservation sites are woefully

substandard. For example, Fossil Grove in Glasgow is an outstanding yet seriously neglected geological site of national and international importance. Siccar Point (Hutton's Unconformity) is an internationally regarded iconic geological site, and yet you wouldn't even know it was there. The ice age Parallel Roads of Glen Roy is an excellent example of the malaise hanging over Scottish geology. Although a site of international importance, its visitor centre, which is supported by Lochaber Geopark, closed for lack of funding.

Scotland's flagship Geoparks receive no core funding from the public purse, despite being an international model of best practice for geoscience communication and sustainable development, recognised by the United Nations. The four Scottish Geoparks (Northwest Highlands, Lochaber, Arran and Shetland) face a huge challenge to make themselves "self sufficient". With over 50,000 visitors to their visitor centres per year and at least 400,000 visits to their landscapes, they are very much where geology meets the general public.

Initiatives

There have been education initiatives, such as the founding of Geobus by the University of St Andrews—a project that goes into classrooms to deliver practical and career focussed workshops, and





inspires school pupils by teaching field skills at geological sites. GeoBus has visited 70,000 pupils over 8 years, but has struggled with a rocky funding history. Geoparks have also been running their own outreach initiatives. Lochaber, for instance, runs an annual primary schools STEM prize, provided talks to schools and a kids STEM club.

Unfortunately, many of these outreach activities have been curtailed as funds ran short. Ultimately, young Earth scientists come up through the education system and are often inspired by the scenery around them. With no governmental support, little or no interest from industry, it is up to us, the community of Earth scientists, to put right this sorry situation.

There are four regional geological societies in Scotland—Edinburgh, Glasgow, Aberdeen and Highland. Together with the Geological Society of London, they represent most geologists not working in the petroleum industry. The universities of Aberdeen, Edinburgh, Glasgow and St Andrew's have significant undergraduate and research programmes in the Earth sciences. The British Geological Survey, Dundee, Heriot Watt, the University of the Highlands and Islands, Stirling and Strathclyde also contribute to geosciences training and research. Scotland is also an exciting laboratory for international research. Despite the range of bodies covering the science, at a pan-Scotland level there is a failure to get the message about the value

of geology to society across to its people, its politicians, and visitors.

Unified body

Until now there has not been a body to bring people from across the different geological communities to work together. To fill this gap, starting in 2019 a group of enthusiastic geologists have been working to establish the Scottish Geology Trust. This exciting development provides the only national organisation in Scotland that can act as a focal point for chronically under-resourced activities such as geoconservation and education. In November 2019, the Trust formally came into existence and in June this year superseded the Scottish Geodiversity Forum and took responsibility for the Scottish Geodiversity charter.

The Trust aspires to be the voice of Earth science in Scotland, with key themes covering:

Promoting Scotland's geology. Improving access to and information about Scotland's Geology by holding an annual geology festival and raising funds to develop public outreach in the geosciences.

Education. Supporting projects like Geobus, and promoting and resourcing the geosciences content of Curriculum for Excellence.

Supporting Scotland's Geoparks. Building support for the network of Scottish geoparks.

Campaigning for Scotland's geology. Taking forward the Scottish Geodiversity charter and its programme, building multi-disciplinary links, promoting geoscience research, geotourism, and getting the message to policy makers and government.

Get involved

In each of these four areas we are currently consulting with our members and other bodies, including the Geological Society of London, on short, medium and long-term action plans. We plan to build strategic partnerships to support our aims and provide a unified agenda on the key issues.

If you would like to assist us in this endeavour please take a look at: www.scottishgeologytrust.org and consider joining the group of Founding Members at: www.scottishgeologytrust.org/join-us/. The Trust launches its first Crowdfunding Campaign in late October. If you can, please donate.

Melvyn Giles is Chairman of the Scottish Geology Trust



The inspirational geology and geomorphology of the Scottish Highlands: Glen Etive from an aerial viewpoint