



What is a Geopark?

Geology underpins our history, our economy and our culture. Ultimately who we are and what we are is built on the geology of the land upon which we live and the story of our geology is the story of why our communities exist.

Geoparks are geographical areas where sites and landscapes of international geological significance are managed using principles of protection, education and sustainable development. A Geopark uses its geological heritage, relating to all other aspects of the area's natural and cultural heritage, to enhance awareness and understanding of key issues facing society, such as using Earth's resources sustainably, mitigating the effects of climate change and reducing the impact of natural disasters.

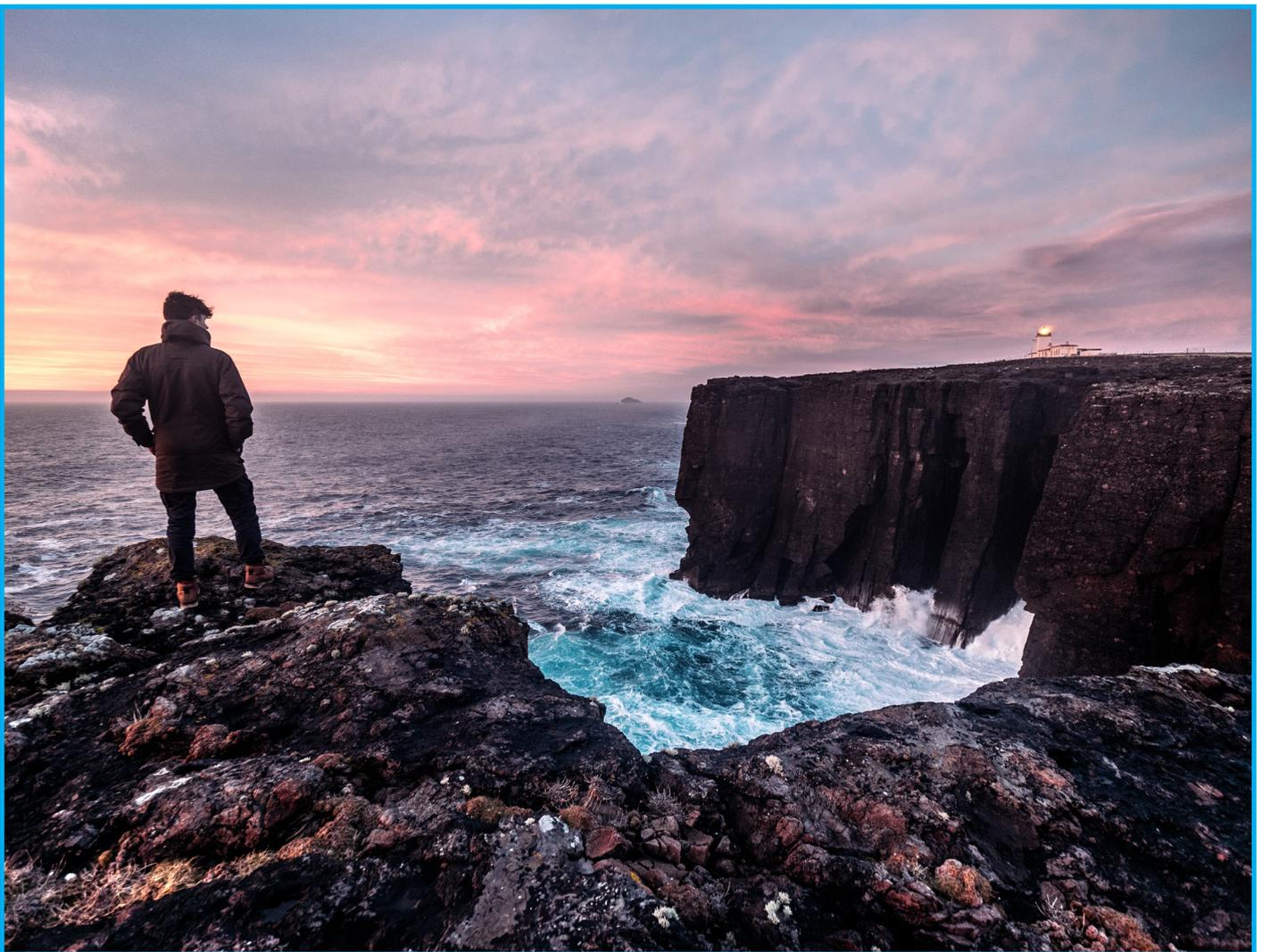
The Global Geoparks Network (GGN), of which membership is obligatory for UNESCO Global Geoparks, is a legally constituted not-for-profit organisation with an annual membership fee. The GGN, founded in 2004, is a dynamic network where members are committed to work together, exchange ideas of best practise, and join in common projects to raise the quality standards of all products and practises of a UNESCO Global Geopark. While the GGN comes together every two years, it functions through the operation of regional networks, such as the European Geoparks Network, that meet twice a year to develop and promote joint activities.

Shetland was admitted to the European Geoparks Network in 2009 in recognition of its internationally important and diverse geology.

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Each individual Geopark has a clearly defined boundary and the limits of the Geopark can be drawn on a map. A UNESCO Global Geopark designation is a result of careful research and hard work leading up to an assessment by independent evaluators. Geoparks are revalidated on a regular basis to ensure that the high standard associated with the UNESCO designation is maintained. Geoparks contain Geosites which are more localised geological sites that have been identified through research into the Geopark's unique geological story. A key part of the UNESCO designation is the integration of the Geopark into not only the geology but also the unique culture and heritage of the area.

By raising awareness of the importance of an area's geological heritage, in both its history and its current society, Geoparks give local people a sense of pride in their region and strengthen their identification with the area. The creation of innovative local enterprises, new jobs and high-quality training courses is stimulated as new sources of revenue are generated through ecotourism, while the geological resources of the area are protected and interpreted for the long term benefit of the community.



Key features and sites of Geopark Shetland

The following represent some of the key geological sites in Shetland and give a flavour of what Geopark Shetland is all about. This pack contains more detailed information about the Geopark and its place in the Drifting Apart story. The following is a list of some of Shetland's important geological sites. The descriptions are necessarily brief and further information is available in the leaflets that accompany this pack. Geopark Shetland is managed by Shetland Amenity Trust and Trust staff will be happy to discuss any aspects the geopark with you.

The Shetland Ophiolite

In the north isles of Unst and Fetlar you can see the Shetland Ophiolite, a section of ocean floor that was forced to the surface when two tectonic plates collided. Because it was tilted on its side you can literally walk from the bottom to the top of a section of ancient earth's crust that was once beneath the sea.

Northmavine Igneous Complex

The Eshaness peninsula is a section through an extinct volcano. Today the remains of this volcano forms one of the highest energy coastlines in the world, being subject to the full force of the Atlantic Ocean, which has carved out a stunning array of stacks, geos and blowholes. The cliff top storm deposits, especially those at the Grind o da Navir can be matched at only a handful of sites elsewhere around the coasts of Western Europe.



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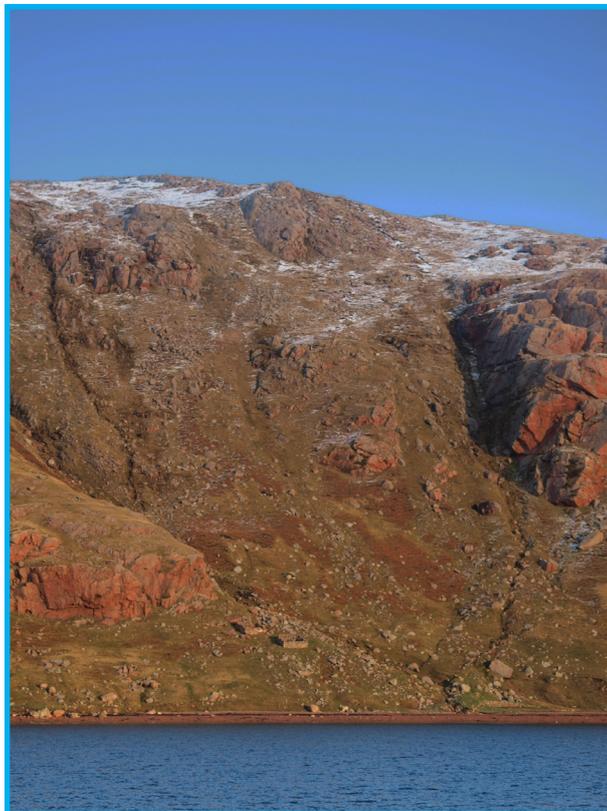
Walls Boundary Fault

The Walls Boundary Fault has a long and complex history and is likely to have been linked to the Great Glen Fault, the major fault that cuts through mainland Scotland along the line from Fort William to Inverness. A trip to the Back Sands at Ollaberry will allow you to see and touch the surface of the actual fault line.



St Ninian's Isle

The beautiful sand tombolo (known locally as an ayre) at St Ninian's Isle is the largest active sand tombolo in the UK, and one of the finest in Europe. St Ninian's Isle became famous when a schoolboy helping at an archaeological dig on the island's tiny Celtic chapel discovered a hoard of silver bowls and ornaments believed to date from around 800AD.



Ronas Hill

The highest point in Shetland, at only 450 meters, the climate is officially designated as sub Arctic by the Scout Association and a full suite of peri-glacial features can be found, some of which are not found anywhere else outside the Arctic Circle.



Keen of Hamar National Nature Reserve

The barren serpentine slopes of the Keen have changed little since the last glaciation. The skeletal soil has remained almost bare for the past 10,000 years and provides a refuge for arctic alpine plants left behind as the ice cap retreated. One such plant - Edmondston's chickweed - grows nowhere else in the world.



Hagdale Chromite mine

The Hagdale chromite mine was the largest in Britain. Here you can see the last surviving horse powered chromite crushing circle of its kind in the UK.

Additional information enclosed with this pack will give you a much more detailed view of how geology has shaped the landscape and culture of the islands.



This entire section could be written with one specific geosite in mind depending on the community group involved.



The Drifting Apart Project

The Drifting Apart project aims to unearth and strengthen our understanding, appreciation and enjoyment of the fascinating and interconnected geological heritage of the Northern Periphery and Arctic region, and its many links to natural, built and cultural heritage. The project will support the development of new and aspiring Global Geoparks, the promotion of innovative products and services for social and economic prosperity and to continue to build a strong network of geological heritage destinations in the Northern Periphery and Arctic Region.

The project brings together a series of partners from Northern Ireland, Ireland, Scotland, Norway, Iceland, Canada and Russia. The total value of the project is €1.6 million with €1.03 million provided through the Northern Peripheries and Arctic Area Programme under the European Regional Development Fund. It is the programme's vision to help generate vibrant, competitive and sustainable communities, by harnessing innovation, expanding capacity for entrepreneurship and seizing the unique growth initiatives and opportunities of Northern and Arctic regions in a resource efficient way.



Why should I work with a Geopark?

As a community group, the first question you should be asking yourself is how your group and your community are going to benefit from a relationship with your local Geopark and the UNESCO Global Geopark network. It's a good question and one which you should answer to your satisfaction before you take the plunge into the geological world. You will have received this pack because you have been identified as a potential partner in increasing the involvement of communities in the development and operation of Geopark Shetland. For such a partnership to work the relationship needs to be mutually beneficial and this document is designed to take you through a process of identifying where the benefits to you might lie.

There is no single approach to the use of geological sites as community assets that can be identified as the 'best way to do it'. Current Geoparks range from small single sites close to major conurbations to relatively remote entire island groups. What suits one location in development and operational terms may be totally inappropriate elsewhere. For example, sites which need to be able to cope with mass market tourism will, to a large extent, have an approach aimed at managing visitors and ensuring the minimum environmental impact. Other sites will be more directly concerned with local interest and with interpretation and education for a more specific local audience.

In the case of Geopark Shetland the whole of Shetland is designated as a Geopark and there is therefore a mixture of "honeypot" and niche sites which will require a different approach from local communities depending on which type of site they are dealing with in their area.

In addition to access to individual sites the Geopark network can be used as a resource of ideas and examples of best practice in the management of geological assets. The UNESCO Global Geopark network represents 35 countries*, some containing many more than one Geopark. Within this overarching network there is capacity for building regional networks such as that proposed by the Drifting Apart project which can build on joint development and a shared geological inheritance within a defined area.

*This may be subject to amendment as new Geoparks achieve UNESCO designation.



COMMUNITIES AND GEOLOGICAL SITES

The first and perhaps most important question for any community to ask itself is why any engagement with a Geopark is worth the investment of perhaps scarce community resources. Almost all communities have a limited amount of people, time and money with which to build a strong community foundation. Any project which makes demands on those resources should rightly be questioned on its merits and needs to make a case for an allocation in proportion to the benefits that are to be gained.

The potential advantages of engaging with a geopark are as varied as the nature of geosites themselves but could be broadly defined under three categories:

1. Educational
2. Cultural
3. Economic

EDUCATIONAL

Apart from its study as a discipline in its own right geology can be introduced into a broad range of subjects on the school or college curriculum. Areas that could be exploited might include but would not be limited to:

- Geography
- History
- Science
- Art
- Mathematics
- Economics
- Computing
- Technology

The exploitation of geology for learning purposes should not however be confined to the classroom.

The provision of interpretation, both printed and digital, the writing of books and pamphlets and the development of tours and activities all provide potential opportunities for informal education at all age levels. This can also be applied to the members of your group and the Geopark may be in a position to facilitate training which will allow you to increase the knowledge and skills of your group members.

As a community group you will wish to consider how your role in the community fits in with potential educational opportunities. Do you already have a defined educational role within your existing remit as is the case with many youth organisations? Can you identify informal educational opportunities that might fit into the activities of your group?



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CULTURAL

The cultural significance of geosites has long been recognised with many sites playing a significant part in the heritage and folklore of the areas in which they are located. Geology has also dictated the locations of sacred sites, settlements and industrial heritage locations and quite often an explanation of underlying geology can provide the starting point for wider interpretation.

Geological features will provide the basis for many local landmarks and place names as well as the foundation for myths, legends and folktales. In the case of local myths the story may quite often point to the origins of the geology, in a strictly non-scientific way of course. These stories are often ancient and may reflect the cultures of indigenous populations as well as legends garnered from more recent settlers in the area.

A combination of these tales and geological interpretation can offer an opportunity to cross over into both educational and economic benefits for the community.



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ECONOMIC

Economically the geology in Geopark areas may already have made an impact. Some Geoparks for instance will have had their geology exposed through quarrying or discovered by mining and this may have continued into the present day. Increasingly however geology is having an economic impact through the medium of tourism. Not only does being a part of the Geopark network promote tourism to a specialist audience it also helps to promote it to a more general audience who have faith in the UNESCO designation as a badge of quality. Carefully managed tourism has the advantage of bringing money into the local economy while being non-destructive to the actual geology.

While much of the community benefits of tourism may be through spend with local businesses there can be opportunities for community groups to sell services, such as tour guiding or operating a visitor centre, directly into the tourism market or to partner with local entrepreneurs in providing added value to their services. Such initiatives can be used to raise money and to develop interpretation and other materials that can be used at a local level, not just for tourists. Community groups can frequently be preferred partners in such initiatives as their local knowledge and flexibility are often unmatched.

In the case of Geopark Shetland, because of our relatively remote location and the relatively high cost of transport, the number of niche tourists willing to travel to the islands purely for their geology is limited and therefore it is particularly important that the Geopark is seen as offering added value to a more comprehensive high-quality tourist package covering different aspects of the islands' natural and cultural heritage. The ability of the geological story to integrate into almost all elements of the islands' heritage makes it a valuable tool in the hands of innovative local groups and it can be delivered most effectively by people with an intimate local knowledge.

The three strands should not be approached in isolation but should be regarded as contributing factors in a holistic approach to community development. Your local Geopark should be viewed as an asset that your group and your community can use to further its goals.



THINGS TO THINK ABOUT

All community groups should consider the following questions before deciding whether to engage with their local Geopark and the wider Global Geopark network:

- What geological sites and stories do we have in our area?
- What is the potential enhancement that these sites and stories can deliver to the work of our group?
- Are there training opportunities that could be delivered through the Geopark that would enhance the knowledge and skills of our group and our community?
- Is the current impact of the Geopark in our area positive or if not can it be made so?
- Could Geoparks provide the basis for a new project or enhance an existing project we are already involved with?
- What is the cost/benefit balance of an involvement with Geoparks in terms of our community resources?

If the answers to these questions lead you to believe that you could use your local Geopark, the UNESCO Geoparks Network and the projects that the network develops as a valuable resource in the development of your community then Geopark Shetland would like to hear from you. If you do not know the answers to these questions but are intrigued by the possibilities we would like to hear from you. We can offer introductions to geological sites, additional information on specific areas and training for your members. We would be happy to meet and discuss how we can help you develop your community assets by adding Geoparks to your recipe for success.

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