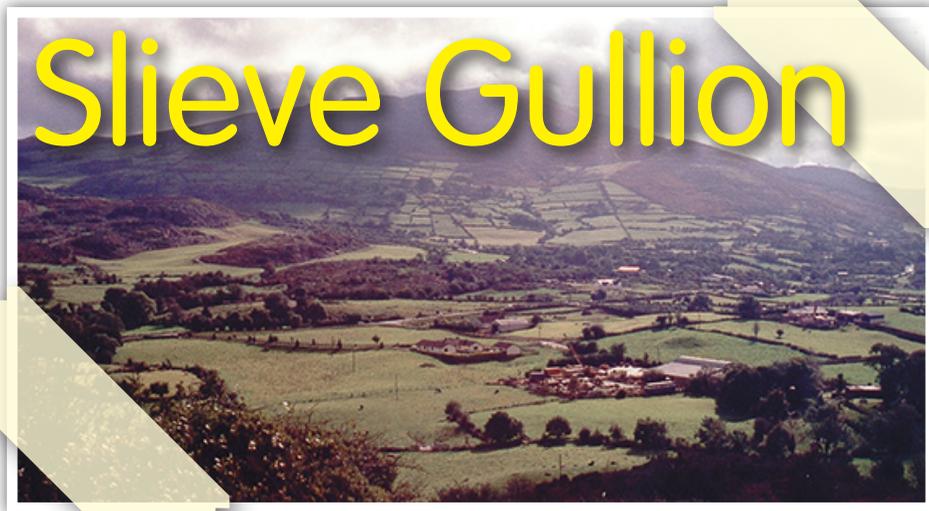


LEARNING 4 FUN

The north of Ireland has some of the most diverse rocks and landscapes in a relatively small area of anywhere in the world. Some of them are well-known such as the Giant's Causeway and the Mourne Mountains, but others have up until now, been the exclusive domain of geologists. Why not take the time to explore some of these hidden landscapes and you might be surprised by what our small country has been through in the past 1.8 billion years!



Slieve Gullion

Slieve Gullion Forest Park just outside Newry is one of the best-kept secrets for a family day out. There are great facilities, including lots of parking, picnic tables, a duck pond, a short nature trail and a coffee shop. However, undoubtedly the newly constructed adventure playground is what steals the show, with play equipment for children of all ages, as well as an adult 'play area' for those that want to burn off some calories.

But while you are there, take the time to have a look at the landscape around you. Slieve Gullion is at the centre of the Ring of Gullion, the remains of an ancient violent 'volcano' that would have erupted over 55 million years ago. The best place to see this is along the 10km scenic drive through the forest that is accessed from the main car park, and offers breathtaking views over the Ring of Gullion on a good day.

The Ring of Gullion was produced when the magma chamber that fed the volcano with molten rock from beneath the surface, was no longer able to support the weight of the volcano above. As the chamber collapsed, it created a number of cracks around its edge, that molten rock was then able to squeeze into. This molten rock has now hardened and forms the 'ring' of rock that we see today. It is mind boggling to think that the Ring of

Gullion gives us the outline of the magma chamber, so if you imagine the size of the 'volcano' that must have been here, it really would have been a 'super-volcano'.

To get the best views, you'll need to follow the trail to the summit of Slieve Gullion which is easily accessed from the scenic drive. From here on a clear day, you can see the entire Ring of Gullion, as well as the Mourne Mountains and the Cooley Peninsula, all of which are made up of once molten rocks that would have formed over 55 million years ago. You can also see the drumlins of Armagh that formed as a result of slowly moving ice sheets (or glaciers) during the last Ice Age.

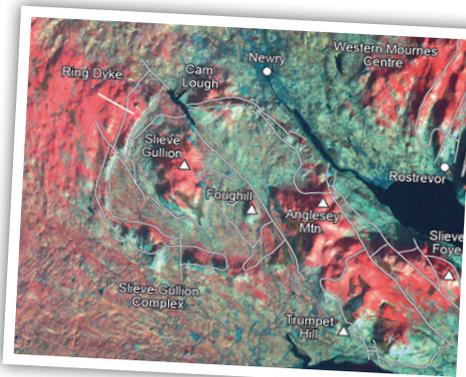
The majority of the island of Ireland was completely covered by ice sheets during the last Ice Age, some of which were up to 1km thick. It really makes you think what a 'bad winter' really is! The last Ice Age ended a mere 13,000 years ago, but the ice sheets have had a significant impact on the Irish landscape. Ice sheets act a bit like giant sheets of sandpaper; they gather up material as they slowly creep across the landscape and this has a scouring effect on the ground beneath, removing material and shaping the landscape as it goes. In fact, the majority of the landscape features that you see from here were shaped by the ice sheets including the Ring of Gullion.

Slieve Gullion and the surrounding area have been subject to a violent and destructive geological history and maybe for this reason there are lots of associated myths and legends. One of the best-known stories involves the most famous of all Irish legends, the giant Finn McCool. Finn McCool was said to be captivated by a beautiful young woman on Slieve Gullion called Calliagh Berras. She claimed to have lost her gold ring in the nearby lake and asked Finn to retrieve it for her. He searched for the ring and eventually found it, only to discover that Calliagh Berras had put a spell on the lake and that he had been transformed into a wizened old man. Finn's men later found Calliagh Berras and managed to persuade her to change him back, but even though he returned to his former self, his hair remained grey. The lake on Slieve Gullion still bears the name of Calliagh Berras, and the adjacent tomb is said to be her house!

Directions

Slieve Gullion Forest Park can be reached from the Newry By-Pass (A1). Follow the B113 Forkhill Road. Pass through the village of Meigh, and one-mile past the Meigh crossroads, the tarmac entrance drive leading into the Forest Park is signposted to the right hand side, on a left bend in the road. Entrance and parking are free.

Article contributed by Dr Kirstin Lemon, Landscape Geologist, Geological Survey of Northern Ireland.



As well as an Area of Outstanding Natural Beauty, there are loads of attractions and activities for a fantastic family day out around the Newry and Mourne area.

Steeped in history, Newry and Mourne boasts a number of stunning castles as well as the commanding cathedral in the city centre. The beautiful Narrow Water keep and castle, which lies on the Co. Down bank of the Newry river, is well worth a visit as is Bagenal's Castle, a sixteenth century fortified building which houses Newry Tourist Information Centre and Newry & Mourne Museum.

If you are lucky with the weather, the Newry and Mourne area is unbeatable

for unspoilt breathtaking views and walks. You can get your boots on to make the trek up to Cloughmore stone above Rostrevor from Kilbroney Park, which offers incredible views of the surrounding forest. If you fancy a less strenuous stroll, take a walk along Cranfield Beach – a long south facing Blue Flag beach that offers water-based activities in the summer months. Slieve Gullion has recently undergone an extensive regeneration to provide a fantastic play park, walks and a new

café and restaurants, all set in the quirky courtyard.

Eating in the city offers plenty of family-friendly options – head to Saponi Italiani for traditional Italian fare – kids will love being able to see their pizzas being created through the open kitchen or try Art Bar Funkel, a bar/bistro that serves tapas-style food, making it a fun and lively meal, perfect for introducing your kids to a whole range of dishes.

How To: Make a Volcano

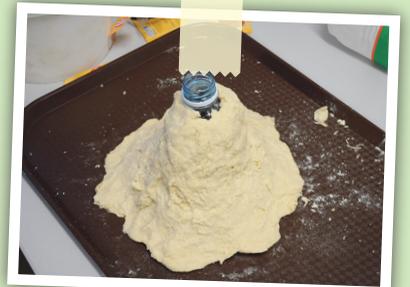
You will need:

1 bag of flour | Water | 1 cup of vegetable oil | White vinegar | Bicarbonate of soda (or baking powder) | Red food colouring | Washing-up liquid | A small drinks bottle (empty) | A tray | A large bowl

Instructions



1. In the large bowl, mix together your flour, vegetable oil and enough water to make a 'dough'. Turn your dough out onto the tray and give it a bit of a knead.



2. Shape the dough around your small drinks bottle to make it look like a volcano, making sure that the hole of the bottle is sticking out the top and that no dough goes into the bottle.



3. Fill the bottle two-thirds with water. Add in a couple of drops of washing-up liquid, half a teaspoon of red food colouring, and two teaspoons of bicarbonate of soda.



4. To make your volcano erupt, add in the vinegar. As you add in the vinegar it will react with the bicarbonate of soda and 'erupt' out of the bottle.