



Down to Earth

"Earth science learning for all"

Melrose in the Scottish Borders October 18-24 2026



Hutton's unconformity at Jedburgh - a sculpture and the real thing!

A word from your leaders...

With the reopening of the Borders Railway between Edinburgh and Tweedbank it has once again become possible to reach into the heart of the Scottish Borders. However, a transport route isn't all that's required for us to run a trip! We need really good geology and a hotel that provides us with a comfortable and affordable base. This last requirement has now been met by the acquisition of the Waverley Castle Hotel in Melrose by Leisureplex, a company that we often use.

The hotel has geology almost on its doorstep with the Eldon Hills being within walking distance. Other placers on our radar include Kelso, Moffat and Jedburgh. With the exception of Moffat and the famous Dob's Linn section these are places that have never featured on any of our excursions. We look forward to welcoming you to new places!

This trip will provide us with a positive feast of excellent geology with something for everyone! From sediments from the Silurian and Devonian to a large variety of igneous rocks and spanning a wide range of time periods. It's going to be a matter of what we leave out rather than what we include, there's just so much.

We'll be getting around via a variety of different means, on foot locally, via a hired bus to more distant places and also making use of the local bus services. As this is 'new territory' for us, we expect this trip to fill up rapidly, especially as we have a fair number of single rooms available.

Chris Darmon & Colin Schofield
Course Organisers/Leaders

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Getting to Melrose

Melrose is less than 5 miles from Galashiels on the Borders Railway which offers a good service of trains (even on a Sunday) from Edinburgh. We suggest that you travel the last short distance by taxi direct to the hotel. If you are coming by car, there are decent roads from the A1 to the east or the M74 to the west, both offering direct links to the south.

Getting Around

For the five days of fieldwork we will be making use of a variety of different forms of transport. For the local geology we'll either walk or make use of the public bus services which are run by Border Buses, a company that also offers hire services, which we have used before. We may also need to

use cars on one day. If you are willing to use your car on the trip, please indicate on the booking form. Daily distances will be modest, and the roads good in largely rural areas. If you want to use your own car, that's fine. We may also use the train to go into Edinburgh one day.

Walking

Everything should be within the capabilities of all of the party. We will always try to get as close as possible to the sites, but this will still mean that there are some walks of a couple of miles, to see the best exposures. There will be some short sections of steep ascents and descents. However, if at any time you wish to 'opt out' that will be fully acceptable and understood. In view of the uncertainties of the weather you are strongly advised to bring all waterproofs and walking boots – particularly as you will be walking over rough ground.

Historic geological map of the Eldon Hills

Why the Scottish Borders?

This comes from the website Geology North:

"Between the England-Scotland border to the south and the Southern Upland Fault to the north, lie the Scottish Borders & Southern Uplands. The area is a discrete tectonic block with a distinct geological history that spans almost 500 million years. Like the rocks of Northern England, there are rocks here that tell the tale of the convergence and collision of the ancient Laurentian, Avalonian, Baltican, Armorican and Gondwana tectonic plates and the compressive, transtensional and extensional forces that resulted. Earth movements caused physical and chemical transformation and re-distribution or rock material together with the production and movement of magmas that gave rise to a variety of geological features.

The oldest rocks that we give an account of in this section aren't, strictly speaking, in this discrete geological block, but they are so bound up with the closure of the Iapetus Ocean that we have included them. These are the igneous, sedimentary and metamorphic rocks that make up the Balantrae Ophiolite Complex. Find out more about them by following the link.

The oldest rocks in the Southern Uplands proper are those of the Crawford group that were scraped off the bed of the diminishing Iapetus Ocean and laid down here on the Laurentian plate in the Lower Ordovician period (about 480 million years ago). Currently, there are two recognised formations: the Raven Gill formation and the Kirkton formation. The first is a succession of basaltic pillow lavas (chemically proven to have erupted at different times from both mid-ocean ridge and island-arc zones), blue-grey cherts and brown mudstone. The second is a sequence of red and grey cherts that contain broken pieces of pillow lava, and red and green mudstones with chert nodules.

Next in line came the Moffat shale group deposited here in the mid-Ordovician to mid-Silurian periods (460 to 430 million years ago). These shales had been originally laid down as sediment over the great expanse of the Iapetus Ocean. In the 1870s, Charles Lapworth studied the fossilised remains of graptolites, long-extinct marine fauna of the Ordovician and Silurian times, in these shales in Moffatdale and in the Girven district. His observation of their systematic development over time not only enabled him to establish a zonal scheme for the deposition of the shales throughout the region, but also a system of biostratigraphy that continues to have international application today."

To this we need to add the later igneous rocks both intrusions and extrusions and it is these that include a few of the more exotic rock types. Thanks to the fact that these are hard, they have been used as local building stones and as aggregates. They can be examined in the built environment and in former quarries.

Itinerary

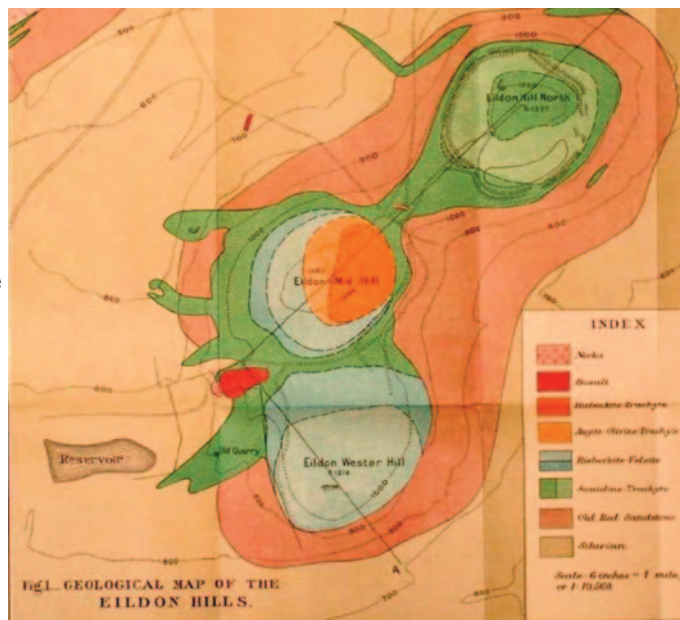
At this stage, this is meant to be indicative of the course content. Final details will be worked out in accordance with the wishes of the group and the prevailing weather.

- The varied rocks of the Eldon Hills
- Hutton's Jedburgh unconformity and its environs
- Arthur's Seat volcano and Holyrood Park, Edinburgh
- Geology of the Selkirk area
- Dynamic Earth Exhibition in Edinburgh
- Dob's Linn and Grey Mare's Tail, Moffat
- Geology of Melrose Abbey and the local built environment.

Accommodation & Food

Good food and a good night's rest are important elements to our tours and we have worked hard to bring you good value in local accommodation. The Waverley Castle Hotel is a mile and half outside Merose and is set in lovely grounds. The hotel offers evening meals, breakfasts and packed lunches. All rooms are ensuite. There's a bar and lounge for guest use.

Single accommodation is available, but is limited and subject to a modest supplement. We are happy to help anyone looking for someone to share a twin bedded room – simply indicate on the booking form.



The Waverley Castle Hotel.

Cost

For 2 people sharing a double or twin room, the cost of the 6-night tour will be £995.00 per person; for single occupancy, the cost will be £1150.00 per person (limited to maximum of 7) after that we will be using double rooms at a slightly higher price.

The iconic Eldon Hills, which are made of igneous rocks.



What's included in the cost?

- The services of Chris Darmon and Colin Schofield as tutors, who will be available to you at all reasonable times
- Accommodation and meals as specified in the brochure
- The cost of any transport used during the trip
- Admissions to museums, caves etc. as visited by the whole group

What's excluded from the cost?

- The cost of travel between your home and Melrose and return
- Travel insurance
- Incidental expenses
- Lunchtime food on the final day

Insurance

Everyone booking a place and paying a deposit is strongly advised to take out holiday insurance. This can cover you against loss of money in the event of cancellation etc. Cover is often included in with your credit card or bank account.

Booking



Please fill in and return a completed booking form.. Your booking will be confirmed upon receipt of either a deposit of £300.00 per person or the full payment. **The balance of the brochure price will be due by July 31st. 2026.**

This trip will run provided a minimum of 12 people have booked by March 31st. 2026.

**Arthur's Seat and the rocks of Holyrood Park Edinburgh
(Image: Scottish Geology Trust)**

Your money...

Upon receipt, all monies paid for these trips are placed in a specific 'client trust account' where it cannot be drawn by us until after completion of the tour. This is in accordance with EU Directives and ensures that your money is safe in the unlikely event of corporate failure by Geo Supplies.

What happens next?

As soon as we are in a position of confirming that the trip will run - pretty soon if previous trips are anything to go by - we will let you know. You will then be free to start making your own travel plans and to take advantage of any early deals on train/air tickets.

Please don't make any such arrangements until we have been in touch with you.

Also see information contained in our 'Residential Field Trips 2025/6'

If you have any questions or queries - contact Chris Darmon as follows:-

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