

# Red Hills 3:

## Glamaig



Two views of Glamaig: the classic view towards the east from Sligachan, and the view across the Narrows of Raasay from Raasay House showing the rugged summit on the left (NE), An Coileach (673 m OD), and the more rounded summit on the right (SW), Sgùrr Mhairi (775m OD). The Glamaig Hill Race runs from the Sligachan Hotel (at sea level) at the head of Loch Sligachan to the summit of Sgùrr Mhairi (and back) and was inaugurated in the 1980s to celebrate the first recorded time for the round trip of 55 minutes, set by the Guerka, Harkabir Tharpa, in 1889, reputedly in bare feet! More recently, a time of around 45 minutes has been recorded. It is doubtful that the geology of this fine mountain is investigated during the race.

This excursion focuses on hybrid rocks of the Marscoite Suite on [Glamaig](#) and in the [Allt Daraich](#) river section. At the summit of [Glamaig](#), the Paleocene basaltic lavas that form a roof to the Glamaig Granite are also examined. [Glamaig](#), of course, provides a spectacular panorama.

**Aspects covered:** the Glamaig Granite; rocks of the Marscoite Suite (marscoite; glamaigite; dioritic glamaigite); hydrothermally-altered and brecciated plateau lavas adjacent to and forming a roof to the Marscoite Suite and the Glamaig Granite.

**Route:** [Sligachan](#) - [Allt Daraich](#) (- [Coire na Sgàirde](#) - [Allt Bealach na Sgàirde](#) - [Bealach na Sgàirde](#) - [Sgùrr Mhairi](#) - [An Coileach](#)) (- return [Sligachan](#)).

**Distance:** 7 kilometres.

Excursion Red Hills: Glamaig

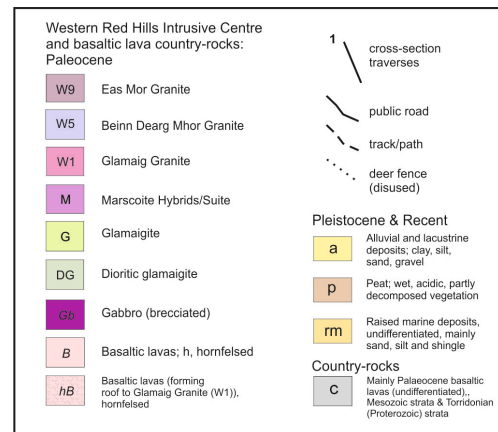
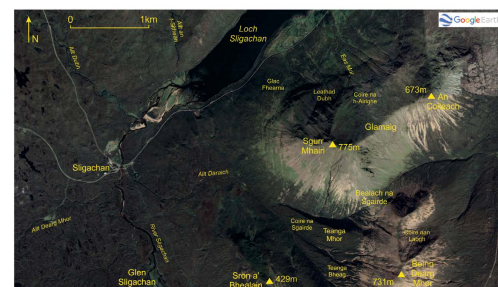
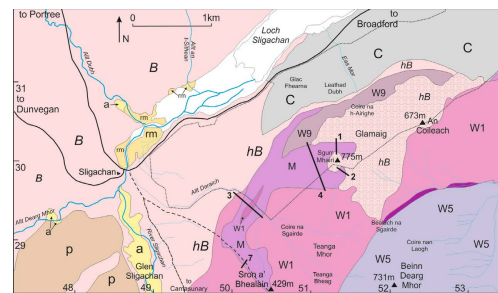
**Time:** Up to 7-8 hours.

**General comments:** There are two parts to the excursion:

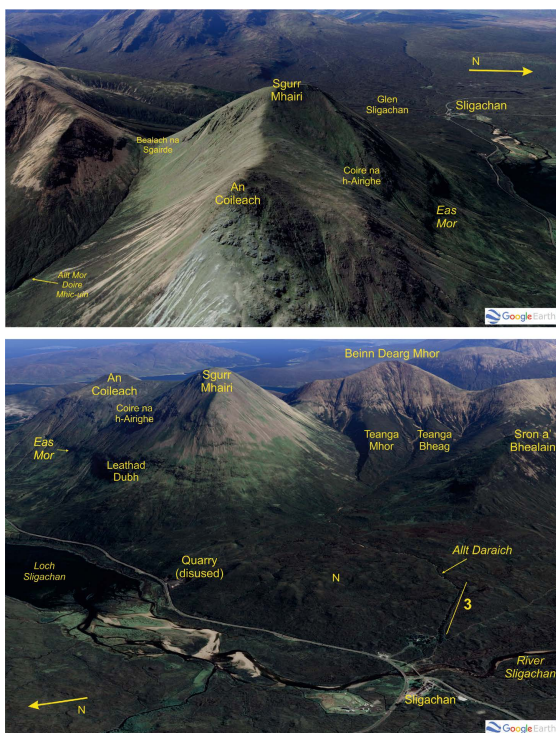
1. A stream-section in the [Allt Daraich](#), with well-exposed contacts between hybrid rocks and the Glamaig Granite;
2. A traverse to the summit of [Sgùrr Mhairi](#) (775m OD) and along the main ridge to [An Coileach](#) (673m OD), over hydrothermally-altered Paleocene basaltic lavas that form a roof to the Glamaig Granite.

Part 1 requires a relatively low water level in the river, most likely after a sustained period of low rainfall. Part 2 requires some effort and can be omitted if energy levels are low. However, the views from the summit are spectacular and are well worth the effort.

[Sligachan](#) lies at the head of [Glen Sligachan](#) on the [Broadford-Portree](#) (A87) road. It is 26km (16 miles) from [Broadford](#) and 14km (9 miles) from [Portree](#). Parking is available in the area, for example, on the south side of the road c. 100m east of the new bridge over the [River Sligachan](#) but is in demand for much of the year.



**Figure Red Hills 3.1:** Summary map and an annotated Google Earth® image of the Glamaig area.



**Figure Red Hills 3.2:** Annotated oblique Google Earth® images of the Glamaig area.

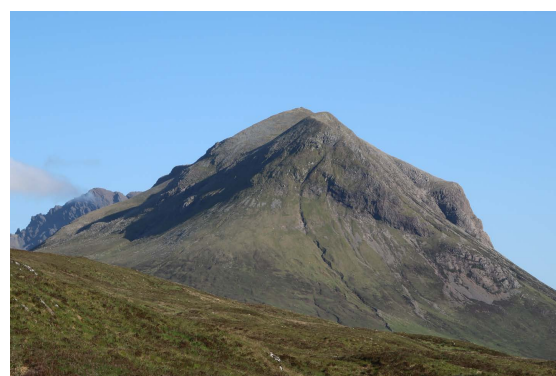
**Locality 1 [NG 4867 2982]:**

From the Collie and Mackenzie Sculpture, one of the most spectacular (and easily achieved!) views of the Cuillin Hills and the Red Hills is obtained on a clear day. In the immediate area and looking down [Glen Sligachan](#), the flat-lying ground to the south is composed of Paleocene plateau lavas, giving way, at [Nead na h-Iolaire](#) on the west side of the glen, to rocks of the Paleocene Cuillin Intrusive Centre. On the east side of the glen, granites and associated rocks of the Western Red Hills Intrusive Centre crop out. These include: the Glamaig Granite on [Druim na Ruaige](#); the Beinn Dearg Mhòr Granite on the [summit of that name](#); and, a sheet of the mixed-magma rock-type, marscoite, forming the crags of [Sròn a' Bhealain](#). The distribution of the granites on [Marsco](#) is complex but revealed by the topography of the mountain.

At the southern end of [Glen Sligachan](#) is [Meall Dearg](#), a red hill composed of the Meall Dearg Granite on the upper slopes and the Ruadh Stac Granite beneath. Both intrusions are part of the Srath na Crèitheach Intrusive Centre. The irregular ridge of [Blà-bheinn](#) ('Blaven'), marking the eastern margin of the Cuillin Intrusive Centre, can be seen in the far distance, SE of [Marsco](#).



**Figure Red Hills 3.3:** The Collie and Mackenzie Sculpture at Sligachan, commemorating two of Skye's famous mountaineers of the 19<sup>th</sup> Century.



**Figure Red Hills 3.4:** Marsco, the highest of the Red Hills at 736m OD, at the southern end of Glen Sligachan, viewed from Sligachan. This mountain is composed of hybrid rocks of the Marscoite Suite ring-dyke and several granites of the Western Red Hills Intrusive Centre. View is towards the south.



**Figure Red Hills 3.5:** Sron a' Bhealain (429m OD), on the east side of Glen Sligachan, composed of Glamaig Granite and hybrid rocks of the Marscoite Suite ring-dyke. View is towards the south.

Proceed south along the [Sligachan - Loch Coruisk](#) path for c. 250m, which starts between the two bridges on the old road, on the east side of the [River Sligachan](#) and runs parallel to the [Allt Daraich](#).



Here, the path on the SW side of the [Allt Daraich](#) starts. Continue SE along this rough path on the SW side of the [Allt Daraich](#). In passing, note the Paleocene lavas that crop out within the stream bed, cut by a NW-SE -trending dyke of the Paleocene regional swarm, giving the stream its distinctly straight form. These lavas are, in places, intensely altered and contain numerous generations of cross-cutting, anastomosing veins of secondary minerals such as calcite and epidote.



**Figure Red Hills 3.6:** A straight section of the [Allt Daraich](#) close to Sligachan, where dolerite dykes of the Skye Regional Dyke Swarm that intrude Paleocene lavas have preferentially eroded, producing a distinctive linear gash.



**Figure Red Hills 3.7:** The straight section of the [Allt Daraich](#) close to Sligachan, viewed towards the WSW from the lower slopes of Glamaig.

At the [waterfalls](#), continue upstream between the old deer fence and the [Allt Daraich](#) for a further c. 1km, past a small confluence on the south side of the stream (at [\[NG 4977 2964\]](#)), to a 3m-high knoll of plateau lava adjacent

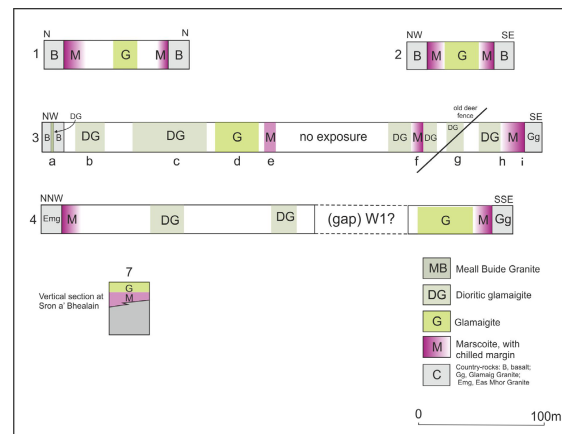
to a small stone wall upon a point-bar is reached. On the NE bank of the stream, immediately opposite, are the ruins of an old stone bothy. The [Allt Daraich](#) section through the ring-dyke that contains various lithologies of the Marscoite Suite, runs from here, SE, for approximately 500m.

**Locality 1 [\[NG 5005 2964\]](#):**

The rock-types involved within this section through the steep-sided ring-dyke are:

1. Marscoite - a pale grey rock with obvious (up to 1cm) xenocrysts of plagioclase (andesine) with distinctly rounded, corroded margins;
2. Glamaigite - a distinctive, obviously heterogeneous granitic rock consisting of dark, round inclusions set in a paler 'matrix'. Xenocrysts of plagioclase (andesine) occur within both components;
3. Dioritic glamaigite - a more homogeneous form of glamaigite, which has the appearance of a 'mafic' granite.

The order of intrusion is: **1**, then **2**, then **3**.



**Figure Red Hills 3.8:** Lithology traverses through the Marscoite Suite ring-dyke. (Location of traverse 3 shown in Figure Red Hills 3.1).

Country-rocks to the ring-dyke are:

1. Hydrothermally-altered and brecciated Paleocene plateau lavas: pale grey, typically non-porphyrific, and veined with calcite, epidote and chlorite;
2. The Glamaig Granite - a medium-grained, hornblende- and biotite-bearing granite containing characteristic, small (1–2cm), rounded to sub-angular, mafic inclusions.

Details of Traverse 3 (Figure Red Hills 3.3) in the [Allt Daraich](#) are:

Proceed upstream from the knoll. The first c. 85m consists of hydrothermally-altered and veined plateau lavas. Close to the margin of the ring-dyke, the lavas are cut by a c. 3m-wide apophysis of dioritic glamaigite (a). There is then a break in the exposure for c. 15m before



relatively continuous exposures of dioritic glamaigite occur (b). Continue upstream through a further length of no exposure then more dioritic glamaigite (c), to the outcrop of (heterogeneous) glamaigite (d). 20m beyond is a small mass of marscoite (e). Proceed upstream for c. 100m to the next exposures. Here, glamaigite is interspersed with a narrow mass of marscoite that crops out in the SW bank of the stream (f). Within the stream bed, below where the old deer fence crosses the stream, extremely heterogeneous glamaigite is found, containing veins of more leucocratic (pale) material (g). Continue upstream, into a gorge, to a well-exposed, sharp contact between glamaigite and marscoite (h). The glamaigite intrusion cuts the marscoite intrusion. Proceed further upstream to (i) where marscoite is chilled against Glamaig Granite (well-exposed in the stream bed).



**Figure Red Hills 3.9:** Amygdaloidal basaltic lavas, acting as country-rocks to the younger granitic intrusions of the Western Red Hills Intrusive Centre. Note the myriad of hydrothermal veins, further evidence for the pervasive ingress of high-temperature hydrothermal fluids. Coin c. 24mm across.



**Figure Red Hills 3.10:** Pale Glamaig Granite, with its distinctive (and characteristic) dark, fine-grained, basaltic inclusions. Bed of the [Allt Daraich](#). Coin c. 24mm across.



**Figure Red Hills 3.11:** Glamaigite, a coarse-grained, heterogeneous, hybrid rock, formed by the incomplete interaction and mixing of intermediate (dioritic) magma (dark component) and granitic magma (pale component). Bed of the [Allt Daraich](#). Coin c. 24mm across.

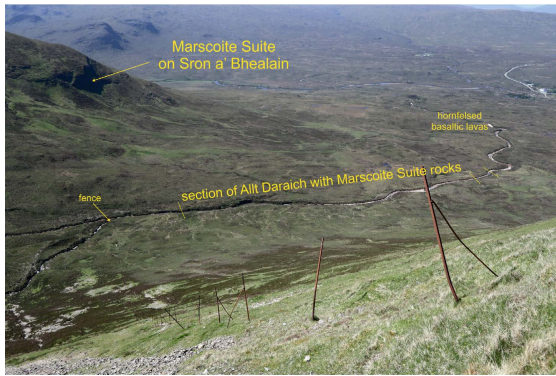


**Figure Red Hills 3.12:** Glamaigite, a coarse-grained, heterogeneous, hybrid rock, formed by the incomplete interaction and mixing of intermediate (dioritic) magma (dark component) and granitic magma (pale component). Bed of the [Allt Daraich](#). Coin c. 24mm across.

Either return to [Sligachan](#) or continue on the second part of the excursion, which involves accessing the summit of [Glamaig](#).

The route involves continuing eastwards, along the [Allt Daraich](#) to where it intersects (at c. 130m OD, [\[NG 5049 2925\]](#)) a remnant of a 19<sup>th</sup> Century 'deer forest' fence that descends down the SW flank of Glamaig. The metal posts are all still in place, although the wires have long since disappeared. The route, along the line of the fence, is towards the NE, up the steep, scree-dominated slope of the mountain towards the summit of [Sgùrr Mhairi](#). This is not difficult, nevertheless tiring, but there are no easier routes to the summit. Be glad you are not competing in the hill race.





**Figure Red Hills 3.13:** Remnants of the 'deer forest' fence on the SW side of Glamaig. View is towards the SW.



**Figure Red Hills 3.14:** Remnants of the 'deer forest' fence on the SW side of Glamaig. View is towards the NE.

Examination of the pebbles, cobbles and boulders that make up this scree-covered face of Glamaig infers that the bedrock lithology on the lower slopes is Glamaig Granite, whereas the upper part of the mountainside is of glamaigite, one of the hybrid rocks of the Marscoite Suite (ring-dyke) (see above).



**Figure Red Hills 3.15:** A fresh surface of one of countless boulders of glamaigite on the steep SW side of Glamaig. Coin c. 24mm across.

Just below the summit (at c. 740m OD) of [Sgùrr Mhairi](#), the higher (at 775m OD) SW summit of Glamaig, the [fence line changes direction](#) (to an E-W trend) and there are exposures of hornfelsed basaltic lavas cut by a thick sheet of red-weathering peridotite.



**Figure Red Hills 3.16:** In the foreground, dark, hornfelsed basaltic lavas close to the summit of [Sgùrr Mhairi](#), the higher of Glamaig's two summits. In the distance is [An Coileach](#), the lower (at 673m OD) summit.



**Figure Red Hills 3.17:** Red-weathering peridotite sheet within hornfelsed basaltic lavas on the SW side of [Sgùrr Mhairi](#). Pole c. 1m long.



From the summit area of [Glamaig](#), a spectacular geological panorama can be seen.



**Figure Red Hills 3.18:** The summit of [Sgùrr Mhairi](#), viewed looking towards the east. The island in the mid ground is Scalpay.

The entire summit ridge of [Glamaig](#), between [Sgùrr Mhairi](#) and [An Coileach](#), is composed of severely hornfelsed basaltic lavas, with abundant amygdales with complex mineral assemblages and anastomosing hydrothermal veins. At the [Sgùrr Mhairi](#) summit there is a rusty orange -weathering sheet of peridotite intruded into the lavas.

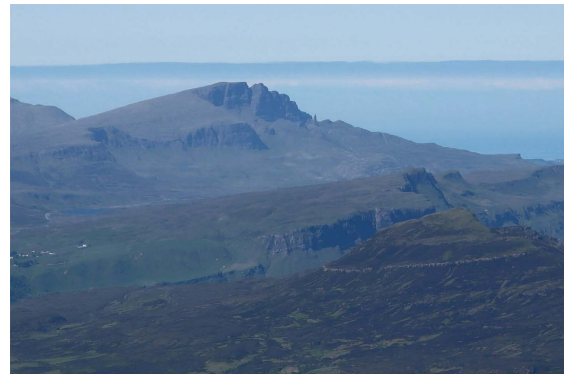


**Figure Red Hills 3.19:** The summit ridge of [Glamaig](#), from [Sgùrr Mhairi](#) NE towards [An Coileach](#), composed of severely hornfelsed basaltic lavas.



**Figure Red Hills 3.20:** The summit ridge of [Glamaig](#), from [An Coileach](#) SW towards [Sgùrr Mhairi](#), composed of severely hornfelsed basaltic lavas. Note line of old fence.

To the north, in the distance, the Paleocene plateau lava sequence of north Skye dips at a shallow angle to the west. The landslipped pinnacle of the [Old Man of Storr](#) can be observed on the steep scarp slope on the east part of the lava pile.

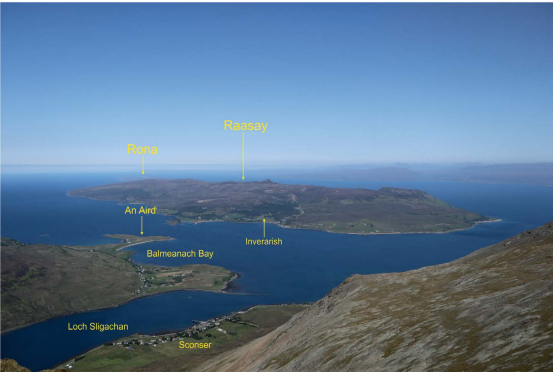


**Figure Red Hills 3.21:** The Storr and the Old Man of Storr, part of the Trotternish escarpment north of Portree. View is towards the north.

To the NE is the head of Loch Sligachan and, beyond, Raasay, with its summit of [Dùn Caan](#) at 444m OD.

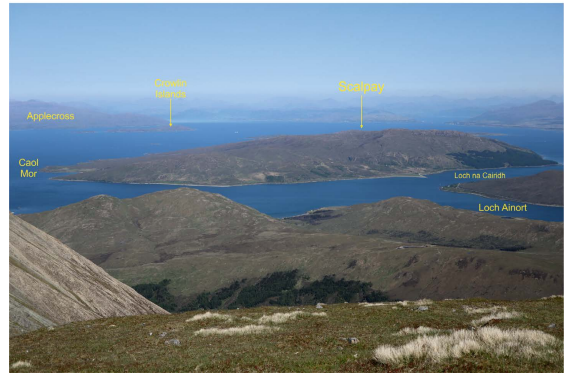


**Figure Red Hills 3.22:** The coastline north of the mouth of Loch Sligachan, with the point of Rubha an Tòrra Mhòir and, to the north, the isthmus of An Àird, from [Sgùrr Mhairi](#). Across the Narrows of Raasay is the west coast of Raasay. View is towards the NE.



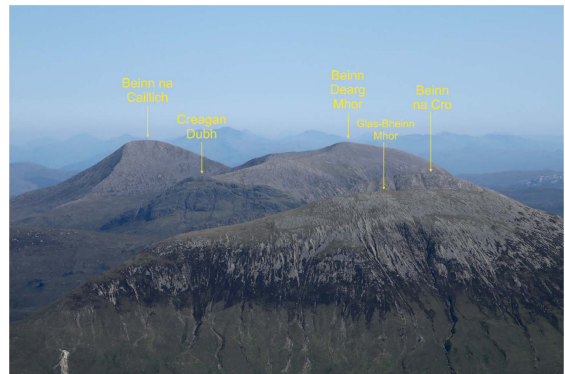
**Figure Red Hills 3.23:** Raasay from [Sgùrr Mhairi](#). View is towards the NE.

To the east is [Scalpay](#).



**Figure Red Hills 3.24:** [Scalpay](#) from [Sgùrr Mhairi](#). View is towards the east.

[Loch Ainort](#) is to the SE, beyond which are the granite summits of the Eastern Red Hills Intrusive Centre.

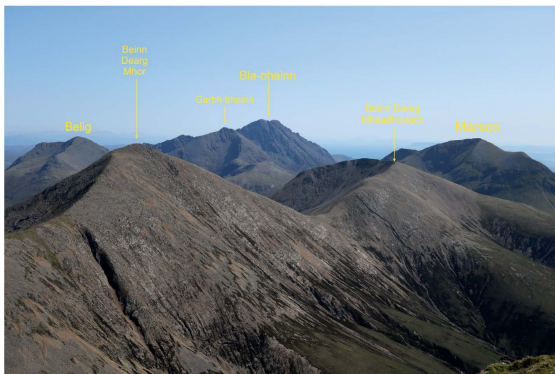


**Figure Red Hills 3.25:** The Eastern Red Hills from [Sgùrr Mhairi](#). The nearest summit is Glas-Bheinn Mhòr, beyond



which are the dark lava crags of Creagan Dubh and the red hills, Beinn Dearg Mhòr and Beinn na Crò. The distinctive, steep-sided, red hill with arêtes in the distance is Beinn na Caillich.

Due south, in the immediate area, is the prominent red hill, [Beinn Dearg Mhòr](#). Further south is the irregular ridge of [Blà-bheinn](#) ('Blaven'), marking the eastern margin of the Cuillin Intrusive Centre.



**Figure Red Hills 3.26:** In the foreground are (from left-to-right) the Western Red Hills, Beinn Dearg Mhòr, Beinn Dearg Mheadhonach and Marsco. In the distance, from left-to-right, are Beinn Dearg Mhòr, Garbh-bheinn and Blà-bheinn ('Blaven'). The large gash on Beinn Dearg Mhòr is the result of the inweathering of a dolerite dyke.

To the SW and west is the main Cuillin ridge, composed of layered basic and ultrabasic rocks of the Cuillin Intrusive Centre, with the [Sgùrr nan Gilleann](#) group of peaks at the northern end.

The 'easiest' way back to [Sligachan](#) is retracing the outward journey route. It is, of course, predominantly over scree and appropriate care must be taken.

End of excursion.