Cuillin Hills 4: Druim Hain to Sgùrr na Stri





Another of Skye's 'not so easy to get to' places, but worth the effort for both the geology and the scenery. Long walks from Sligachan, Elgol and Kilmarie can be avoided if use is made of one of the tourist boats that ply between Elgol and the landing stage at Loch na Cuilce, a small embayment of the larger Loch Scavaig. The boats run throughout the Spring, Summer and Autumn months, weather permitting, of course. Located within the area is The Monument, a tribute to A. J. Maryon, who died on these hills in July 1946 and whose body was not discovered for nearly two years. The Monument was erected by his friend, Myles Morrison, who served with him in World War II.

Aspects covered: various textural varieties of coarsegrained layered and unlayered basic igneous rocks; the Meall Dearg Granite; cone-sheets; the glacial morphology and landforms of the <u>Loch Coruisk</u> basin.

Route: Loch na Cuilce Landing Stage – cairns on the Loch Coruisk to Sligachan path [NG 5010 2137] – Druim Hain – Sgùrr Hain -Sgùrr na Stri (- return Loch na Cuilce Landing Stage).

General comments: This is a challenging but rewarding excursion and should be saved for a good weather day. It is difficult to reach <u>Druim Hain</u> by foot, especially as time is required to examine the rocks, but access is made considerably more achievable by tourist boats that run from <u>Elgol</u> during the Spring, Summer and Autumn

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months. Timetables vary and need to be checked/confirmed/booked in advance. This is the best, easiest and safest way to access Loch Coruisk.

For the fit, access on foot is also possible from <u>Elgol</u> or <u>Kirkibost</u> [NG 5451 1719], both on <u>Strathaird</u>, via <u>Camasunary Bay</u> [NG 5131 1876], crossing the <u>Abhainn</u> <u>Camas Fhionnairigh</u>, and taking the indistinct path on the south side of <u>Sgùrr na Stri</u> (10km; 4 hours).

Caution needs to be exercised when fording the <u>Abhainn</u> <u>Camas Fhionnairigh</u>. It is tidal (where entering <u>Camasunary Bay</u>) and, during periods of high tide, can only be crossed further (sometimes much further) upstream. During periods of high rainfall, even at low tide, the river may be difficult to cross. Conversely, during periods of drought, at low tide, the river can be safely crossed with ease, even without getting wet boots. So, save this excursion for a dry and sunny day.

With this route, just before reaching Loch Coruisk, <u>The</u> <u>Bad Step</u> (or Ladies' Step of some old maps) needs to be negotiated with care.

An alternative route is from <u>Sligachan</u> via <u>Glen Sligachan</u> and the northern end of <u>Srath na Crèitheach</u>, to reach the <u>SE end of Druim Hain</u> (8km/3 hours each way) and thence <u>Loch Coruisk</u>.

It is strongly suggested that the logistics of this excursion are considered carefully.

Distance: 11 kilometres (excluding access into and out of the area, see above).

Time: 7 hours (but see General comments, above).



Figure Cuillin 4.1: Oblique Google Earth[®] image of the Druim Hain – Sgùrr na Stri area. View is towards the SW. An annotated version of this figure, Figure Cuillin 10.4, is used below, to provide locality guidance.



Figure Cuillin 4.2: The Scavaig River stepping-stones. A 'walk in the park' crossing during Skye's usual good weather, but an uncrossable monstrous torrent when it occasionally rains..... View is towards the NE, along the axis of the path to the cairns between Druim Hain and Sgùrr Hain: the low ground on the horizon.



Figure Cuillin 4.3: Summary map the Druim Hain – Sgùrr Hain – Sgùrr na Stri area.



Figure Cuillin 4.4: Annotated oblique Google Earth[®] image of the Druim Hain - Sgùrr Hain - Sgùrr na Stri area. View is towards the SW. The path from Sligachan to the cairns is conspicuous.



Figure Cuillin 4.5: Annotated Google Earth[®] image of the Druim Hain - Sgùrr Hain - Sgùrr na Stri area. Main paths indicated.

Assuming arrival by boat at the Loch na Cuilce Landing Stage, follow the path NE along the west side of the Scavaig River (on some maps, incorrectly, River Coruisk) and cross at the <u>stepping-stones</u>. This may be difficult and unsafe during periods of heavy rain, hence the advice to save this excursion for a good weather day. With a length of less than 300m, it is reputed to be Britain's shortest river.

Upon crossing the stepping-stones, head north around the (SE) end of <u>Loch Coruisk</u>. The path has a fairly gentle gradient and rises to *c*. 300m OD at the <u>cairns</u>. Head NW towards the conspicuous ridge of <u>Druim Hain</u>, which is the result of the contrasting weathering and ease of erosion of the layered Inner Gabbros, the youngest of the units of the Cuillin Intrusive Centre, and the granites that form <u>Meall Dearg</u>, part of the Srath na Crèitheach Intrusive Centre.

Locality 1 c. [NG 4930 2256]:

The most instructive examples of layered gabbro occur the length of <u>Druim Hain</u>, but are particularly good a few hundred metres SSE of the granite hill, <u>Meall Dearg</u>.

The granite can be visited if of interest, although weathered with fresh material very difficult to find. There is of course a good view to the north which might entice you to go.



Figure Cuillin 4.6: Meall Dearg from the ridge of Druim Hain. The contrasting colour and resistance to erosion between the gabbro of Druim Hain and the younger granite of Meall Dearg are striking.



Figure Cuillin 4.7: Typical Meall Dearg Granite, whitish brown on (typical) weathered surfaces. Comprises large hornblende needles, quartz and plagioclase-cored alkali feldspar crystals, the latter two (volumetrically) dominant. Coin *c.* 24mm across.



Figure Cuillin 4.8: Banded and (locally) brecciated Meall Dearg Granite. Coin *c.* 24mm across.

The Inner Gabbros provide some of the best examples of layered basic rocks within the Cuillin Intrusive Centre and are interpreted to have formed relatively late in the crystallisation history of the intrusive centre. They are located within the innermost portion of this composite intrusion. Material to the NE, that was part of the intrusive centre, is now absent, which can be attributed, in part, to the emplacement of the younger Srath na Crèitheach Intrusive Centre, of which the granites on <u>Meall Dearg</u> are part.

The inclination of the layering is towards the NE and the dip values on <u>Druim Hain</u> are the highest within the intrusive centre, typically *c*. 45° and, locally, up to 55°. The progressive increase in dip of the igneous stratification, from the margin of the intrusive centre (10-20°) to the anomalously high values at <u>Druim Hain</u>, may be the result of some form of post-crystallisation collapse as the magma emplacement events associated with the development of the intrusive centre came to a close.

Banding is the most common feature, made particularly conspicuous where dark layers rich in pyroxene and/or magnetite are in juxtaposition with pale plagioclase-rich

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layers. The other locally obvious mineral that has crystallised from this relatively evolved/fractionated magma is apatite, which forms sub-centimetre layers, most evident where 'bedding surfaces' containing these mats of crystals are exposed.

Elsewhere, there are features that might be interpreted as 'cross stratification', and channel-like structures that could be attributed to erosion of previously accumulated crystals by magmatic currents. The volume of magma within an 'Inner Gabbro' chamber at any one time is not easily determined but is unlikely to have been large; rather, magma was emplaced in a more piecemeal fashion, leading to periods of chamber inflation, crystallisation and crystal accumulation, followed by emplacement of further batches of magma, capable of disrupting the previously formed material. Good evidence of crystal settling is largely absent, for example, there are no obvious examples of features such as size grading. More likely, layers conspicuously enriched in one mineral, for example, magnetite, may be the product of excess crystallisation due to saturation conditions within the magma, possibly influenced by parameters such as temperature and oxygen fugacity.



Figure Cuillin 4.9: Steeply inclined alternating layers of plagioclase-rich (pale) and clinopyroxene-rich (dark) gabbro, dipping towards the NE. View is towards the NE, with (left-to-right) Marsco (in shade), Ruadh Stac and Garbh-bheinn in the distance. Iain Allison for scale.



Figure Cuillin 4.10: Steeply inclined alternating layers of plagioclase-rich (pale) and clinopyroxene-rich (dark) gabbro. View is towards the east, with Blà-bheinn in the distance. Pole *c*. 1m long.



Figure Cuillin 4.11: Relatively homogenous and continuous layers of typical gabbro, with stratification defined by dark clinopyroxene-rich layers. Upper part of section is comparatively homogeneous. Pole *c.* 1m long.



Figure Cuillin 4.12: Inclined, laterally continuous, magnetite-rich layer within a sequence of layered, relatively plagioclase-rich gabbro. Coin *c.* 24mm across.



Figure Cuillin 4.13: Detail of a *c*. 8cm thick magnetite-rich layer within a sequence of relatively plagioclase-rich gabbro (with minor magnetite). Coin *c*. 24mm across.



Figure Cuillin 4.14: Layer of coarse, magnetite-dominated rock (magnetitite). Coin *c.* 24mm across.



Figure Cuillin 4.15: Mat of randomly oriented apatite crystals on a gabbro 'bedding' surface. Coin *c*. 24mm across.



Figure Cuillin 4.16: Lensoid layers of olivine-rich gabbro interleaved with plagioclase-rich variants. View towards the NE. Pole *c.* 1m long.



Figure Cuillin 4.17: Lensoid mass of (fine-grained) basaltic rock within olivine-rich gabbro interleaved with plagioclase-rich variants. Pole *c*. 1m long.

One feature within the <u>Druim Hain</u> gabbros that can be attributed to the proximity of the younger granites of the Srath na Crèitheach Intrusive Centre is the presence of minor silicic intrusions of microgranite and rhyolite/felsite, with a wide variety of forms ranging between thin sheet-like bodies through to somewhat amorphous forms, some containing xenoliths of (locally derived) gabbro. These silicic intrusions are, essentially, apophyses (offshoots) of the Srath na Crèitheach Intrusive Centre granites. In places this material is banded and commonly it has a spherulitic texture, suggestive that it was originally glassy and subsequently devitrified, possibly in response to the ingress of hydrothermal fluids which circulated throughout the central complex during its growth and final cooling phase.



Figure Cuillin 4.18: Network of pale silicic (microgranite/felsite) sheets within the dark gabbros of Druim Hain. Iain Allison for scale.



Figure Cuillin 4.19: Irregular microgranite sheet with xenoliths derived from the fragmentation of the adjacent gabbro. Pole *c.* 1m long.



Figure Cuillin 4.20: Detail of banded (a) and spherulitictextured rhyolite (b, c & d) within one of the silicic intrusions of Druim Hain. Coin *c.* 24mm across.

Return to the <u>cairns</u> and continue on a south-eastward traverse towards the summit of <u>Sgùrr Hain</u>. Initially the outcrop is poorly exposed Inner Gabbros (F), beyond where there is an obvious crag protecting the summit of <u>Sgùrr Hain</u>, made of the Inner Cross-cutting Bytownite Gabbro (D in Figure Cuillin 4.21, also referred to as the Unlayered Olivine-bytownite Gabbro of Druim nan Ramh). This is the main lithology from this crag as far SE as the summit of <u>Sgùrr Hain</u>. Directly down (nearer) from the crag, is an intrusion breccia (X) dominated by fragments of basalt and dolerite.



Figure Cuillin 4.21: Annotated oblique Google Earth[®] image of the area between the (Druim Hain) cairns and Sgùrr Hain. D: Inner Cross-cutting Bytownite Gabbro; F1: Inner Gabbros; X: breccia. Main path indicated.



Figure Cuillin 4.22: Sgùrr Hain viewed looking towards the SE from the eastern end of Druim Hain. The rocks in the foreground are part of the Inner Gabbros (of Druim Hain), the tract of poorly exposed ground beyond is the outcrop of a ring-shaped intrusion breccia comprising basalt, dolerite and tuffisite, and the summit of Sgùrr Hain is part of the Inner Cross-cutting Bytownite Gabbro(s).

Constituting a width of a few tens of metres, the annular outcrop of the breccia crosses the ridge between the <u>cairns</u> and <u>Sgùrr Hain</u>. Exposure is poor, a feature which helps to define the outcrop. Minor crags are composed of a breccia, interpreted to have formed by tectonic (faultrelated) fragmentation. The dominant clasts are of basalt and dolerite, together with conspicuous fragments of orange-weathered peridotite. One feasible interpretation is that the Inner Gabbros are on the downthrow of the fault zone, consistent with a collapse model to explain the high dip of the layering within the Inner Gabbros.



Figure Cuillin 4.23: Typical breccia forming the annular outcrop between the Inner Cross-cutting Bytownite Gabbro and the Inner Gabbros on the ridge between the Druim Hain cairns and Sgùrr Hain. Pole *c.* 1m long.



Figure Cuillin 4.24: Detail of breccia forming the annular outcrop between the Inner Cross-cutting Bytownite Gabbro and the Inner Gabbros on the ridge between the Druim Hain cairns and Sgùrr Hain. Coin *c.* 24mm across.

Continue to the Summit of <u>Sgùrr Hain</u> over well exposed Inner Cross-cutting Bytownite Gabbro. Its name, when first recognised, was the 'invading eucrite' (or bytownite gabbro in model terminology), inferring its relatively latestage emplacement. The dominant mineralogy is clinopyroxene and calcic plagioclase in an ophitic intergrowth: large dark green plates of the pyroxene that have grown over and enveloped smaller pale plagioclase crystals.



Figure Cuillin 4.25: Inner Cross-cutting Bytownite Gabbro in the Sgùrr Hain summit area. Pole *c*. 1m long.



Figure Cuillin 4.26: Detail of Inner Cross-cutting Bytownite Gabbro in the Sgùrr Hain summit area, with conspicuous plates of dark green clinopyroxene in an ophitic texture with smaller pale crystals of plagioclase. Coin *c.* 24mm across.



Figure Cuillin 4.27: Fragments of oxidised magnetitebearing gabbro within the Inner Cross-cutting Bytownite Gabbro in the Sgùrr Hain summit area. Pole *c*. 1m long.

From the summit of Sgurr Hain, head SW to join the ridge that connects with the summit of Sgurr na Stri (494m OD), avoiding the SE extension of the Sgurr Hain ridge, which descends towards Camasunary. There is a well-developed path in the lead-up to the summit of Sgurr na Stri. The rocks forming much of Sgurr na Stri belong to the Outer Bytownite Gabbros, conspicuous by their layered character, although most obvious close to the summit. Various subdivisions are recognised, the dominant one north of the summit is the C2 unit, containing lenses of anorthosite and dunite (plagioclase- and olivinedominated, respectively), xenoliths of basalt and dolerite, and megacrysts of plagioclase, the last a feature of the entire sequence of Outer Bytownite Gabbros. As with the Inner Gabbros (see above), various interpretations can be put forward to explain the origin of the myriad of features within these layered rocks, including gravitational settling of crystals, in situ crystallisation, and multiple injection models.

The other obvious units on <u>Sgùrr na Stri</u> are Paleocene NW-SE -trending dykes of the regional swarm, and dolerite and basalt cone-sheets which have orientations similar to the igneous layering.



Figure Cuillin 4.28: Exposure of the Outer Bytownite Gabbro on Sgùrr na Stri, with conspicuous layering. View towards the north. Pole *c.* 1m long.



Figure Cuillin 4.29: Exposure of the Outer Bytownite Gabbro on Sgùrr na Stri, with conspicuous layering. View towards the north. Pole *c*. 1m long.



Figure Cuillin 4.30: Summit exposures of the Outer Bytownite Gabbros on Sgùrr na Stri. View is towards the NE, with Blà-bheinn in the distance.

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Figure Cuillin 4.31: An example of a dolerite cone-sheet within the Outer Bytownite Gabbros near to the summit of Sgùrr na Stri. Note related thin intrusion at bottom right. Pole *c.* 1m long.

The effort made to get to the summit of <u>Sgurr na Stri</u> is rewarded by one of Skye's iconic views, west to <u>Loch</u> <u>Coruisk</u> and the main ridge of the Cuillin Hills. The NW-SE -trending, glacially excavated trough (water depth of almost 40m) in which the loch is located is surrounded by classic examples of corries and arêtes. At the seaward end of the loch there is a minor rock step, or lip, which has been breached by Britain's shortest river, at less than 300m, the <u>Scavaig River</u>.

Sgùrr na Stri has been loosely translated from Gaelic to *Peak of the Fight (or Strife)* and the name has the attached story or legend that in a land dispute between two clan chiefs, a young boy was taken to the eventually agreed boundary on <u>Sgùrr na Stri</u> and thrashed in order that someone would remember its location. Hopefully not true.

On 7th December 1982, a U.S. pilot and his weapons system operator lost their lives when their General Dynamics F-111F crashed into the south side of the mountain. It is reported that the shock wave of the crash was felt by occupants of the <u>Camasunary Bothy</u>. The aircraft was not armed. Minor pieces of wreckage continue to be found. A sad event.



Figure Cuillin 4.32: Loch Coruisk from the western, slightly lower, of the twin summits of Sgurr na Stri. The seaward (near) end of the loch is separated from the sea by a minor rock barrier, or lip, which has been breached by Britain's shortest river, the Scavaig River.



Figure Cuillin 4.33: The Scavaig River from the summit of Sgùrr na Stri. The river has breached a minor rock barrier, or lip, before it runs to the open sea of Loch Scavaig (top right).

The return journey does not need to go via the <u>cairns on</u> <u>the Loch Coruisk to Sligachan path [NG 5010 2137]</u> (i.e. retracing the outward route), but rather can be shortened by heading NNW down the relatively gentle slope towards <u>the path on the SE (near) side of Allt a'</u> <u>Choire Riabhaich</u> and thence SW to the <u>stepping-stones</u> across the <u>Scavaig River</u>, and onwards to the <u>Loch na</u> <u>Cuilce Landing Stage</u> and <u>Elgol</u>.

If desired, the <u>Monument</u> to A. J. Maryon, SW of <u>Sgùrr</u> <u>Hain</u> at [NG 4987 2059] can be visited.



Figure Cuillin 4.34: The Monument, SW of Sgurr Hain.

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Figure Cuillin 4.35: Plaque on The Monument, SW of Sgùrr Hain.

End of excursion.