

Raasay 3:

Dùn Caan



The summit of Dùn Caan is the highest point on Raasay at 444m OD. It provides a wonderful view over much of the island, and beyond (east) to Applecross on the Scottish Mainland, (west) to Trotternish and (south) to the Red Hills and Cuillin Hills of central Skye. Its relatively flat summit provided an opportunity for James Boswell, who accompanied Dr Samuel Johnson in 1773 on his Journey to the Western Islands of Scotland, to dance. Dr Johnson, missed out on this opportunity and did not venture up this delightful hill and enjoy the panorama.

Aspects covered: a sill-like Paleocene granite; sandstone of the Middle Jurassic Druim an Fhuarain Sandstone Member; sandstone of the Upper Cretaceous Morvern Greensand Formation; Paleocene basaltic lavas; a spectacular panorama of Raasay, Skye and the Scottish mainland.

Route: [Path south of Balmeanach \(signposted Dùn Caan\)](#) – [Càrn Sgrabach](#) - [Bealach Ruadh](#) - [Loch na Meilich](#) - [Dùn Caan](#) (- [return road](#)).

Distance: 6 kilometres.

Time: 4 hours.

General comments: This excursion makes use of an excellent path starting at an elevation of 140m OD, leaving only 300m of ascent to the summit of [Dùn Caan](#). There is a small drop in height (c. 30m) from [Bealach Ruadh](#) to the shore of [Loch na Meilich](#), before the final ascent of the hill. The view from the summit of [Dùn Caan](#) provides an excellent overview of much of the geology of central Raasay, and beyond. This easily won viewpoint is one of the best within the Hebrides.

Take either of the near-parallel roads north from [Inverarish](#) for c. 5km (3 miles) to a point c. 500m south of [Balmeanach](#), where the signposted path to [Dùn Caan](#) starts. Parking is available.

Excursion Raasay 3: Dùn Caan

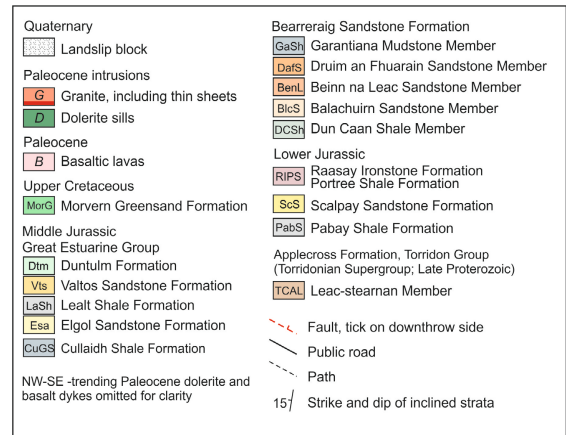
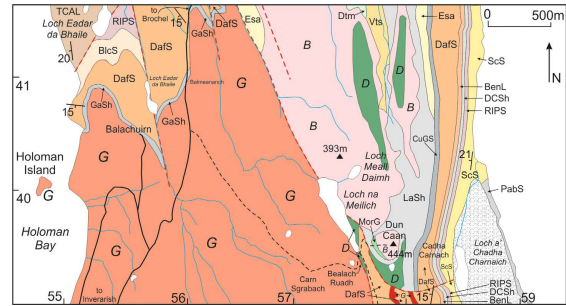


Figure Raasay 3.1: Simplified geological map and key to the area around Dùn Caan.

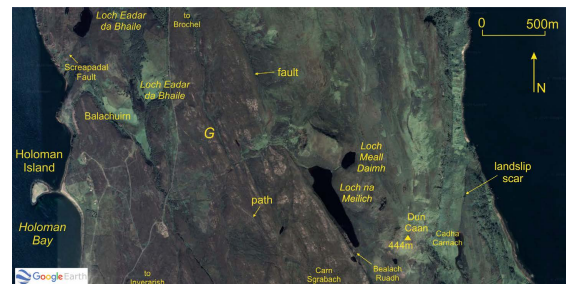


Figure Raasay 3.2: Annotated Google Earth® image of the area around Dùn Caan.



Figure Raasay 3.3: Annotated oblique Google Earth® image of the area south of Dùn Caan. D: dolerite sills; G: granite.

Follow the path SE over the Paleocene granite that crops out over a large part of central Raasay. This intrusion has a sill-like geometry, emplaced into Middle Jurassic strata dipping towards the west. The gradient/slope of the path, uphill towards the SE, approximately follows the true

inclination of the sill, which dips towards the NW. The granite is porphyritic, with phenocrysts of quartz and alkali feldspar, up to 5mm across, set in a granophyric groundmass. The main mafic mineral is the sodium-rich amphibole, riebeckite: dark blue when fresh, but more likely to be rusty-brown on typically weathered surfaces.



Figure Raasay 3.4: Typical exposure of the Raasay Granite in the vicinity of the path from the main road. View is SE towards Càrn Sgrabach.



Figure Raasay 3.5: Typical exposure of the Raasay Granite in the vicinity Càrn Sgrabach. View is NW towards Ben Tianavaig (left of centre), SE of Portree.

Continue uphill along the path for c. 2km, to [Bealach Ruadh](#) ('Red Pass'), south of the small unnamed [lochán](#).

Locality 1 [NG 5761 3924]:

The significant NNW-SSE -trending granite escarpment is the result of a fault, with (poorly) exposed Jurassic strata (downhill) to the NE. A further fault brings poorly exposed Upper Cretaceous Morvern Greensand Formation strata and the overlying summit-forming Paleocene lavas of [Dùn Caan](#) down to the NE. The steep escarpment has produced a significant scree cover of fragments of granite. The linear SW side of the [Loch na Meilich](#) essentially defines the trace of the fault. From here, it is evident that exposure in the low ground at the SE end of the loch is poor; based upon the outcrop pattern further south (not visited during this excursion) the prognosed lithology is strata of Middle Jurassic age and this matches with minor exposures of pale sandstone on the path where it ascends towards [Dùn Caan](#) at the south end of

[Loch na Meilich](#). The view across the low ground, east, towards [Dùn Caan](#), illustrates the hard cap of rusty-brown -weathering Paleocene lavas with near-vertical prismatic joints, implying that the lavas are near to horizontal. On the lower NW slope of [Dùn Caan](#), an obvious spring with verdant vegetation below, marks a boundary, possibly a fault with Middle Jurassic and Upper Cretaceous strata in contact. A lack of good exposure leaves this interpretation unresolved.



Figure Raasay 3.6: Granite escarpment on the SW side of Loch na Meilich that defines a NNW-SSE -trending fault. On the far (NE) side of the loch are poorly exposed basaltic lavas on the low ground, capped by Paleocene dolerite sills of the Little Minch Sill Complex. Person for scale.

Follow the rough path from [Bealach Ruadh](#), downhill and north to the SE end of [Loch na Meilich](#) and thence along the zig-zag path on the west side of [Dùn Caan](#) to the summit.

A minor diversion to exposures of a dolerite sill south of [Dùn Caan](#) can be made before the final ascent.

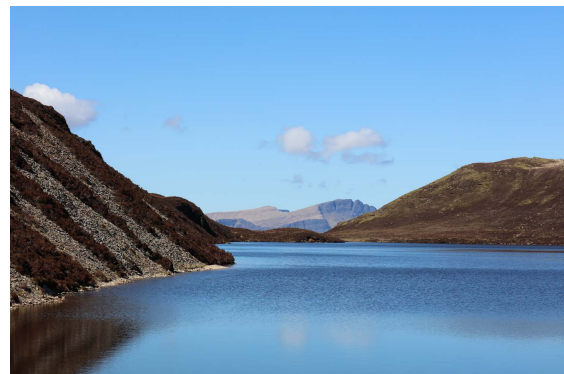


Figure Raasay 3.7: The SE side of Loch na Meilich, which helps to define a NNW-SSE -trending fault. To the SW (left), forming a prominent scree-covered escarpment is the Raasay Granite (sill). To the NE, essentially defined by the margin of the loch, are poorly exposed Middle Jurassic strata, together with basaltic lavas forming the higher ground, far right. In the distance is the lava escarpment of The Storr on Trotternish, north Skye.



Figure Raasay 3.8: Profile of Dùn Caan, viewed towards the east from the small lochan north of Bealach Ruadh. The summit of the hill is composed of horizontal Paleocene basaltic lava(s) with near-vertical prismatic joints. Below, in the very poorly exposed ground, are green (glaucopitic) sandstones of the Morvern Greensand Formation, typically found as loose fragments close to the summit path.



Figure Raasay 3.9: The summit area of Dùn Caan viewed towards the east, formed of an outlier remnant of the Paleocene lava sequence of north Skye. The terraced character of the hillside defines individual lavas, as does subtle differences in surface weathering coloration and joint development. Minor screes have developed from weathered lava-top material.

The exposures of the sill south of [Dùn Caan](#):



Figure Raasay 3.10: Paleocene dolerite sill emplaced into (poorly exposed) Middle Jurassic strata south of the summit of Dùn Caan. View is towards the east.



Figure Raasay 3.11: Detail of block-jointed dolerite sill emplaced into (poorly exposed) Middle Jurassic strata south of the summit of Dùn Caan. View is towards the SE.

Continuing to the summit of [Dùn Caan](#):



Figure Raasay 3.12: Banding within one of the thick lavas forming the upper part of Dùn Caan, close to the summit path. Weathering has produced the distinctive brown coloration and highlights the banded character of the lava. Pole c. 1m long.



Figure Raasay 3.13: Contorted banding within one of the thick basaltic lavas forming the upper part of Dùn Caan, close to the summit path. Weathering has produced the distinctive brown coloration and highlights the banded character of the lava. Ruler 30cm long.

The relatively flat summit of [Dùn Caan](#), at 444m OD, is composed of a Paleocene basaltic lava. It provides a spectacular panoramic view.

Locality 2 [\[NG 5791 3950\]](#):



Figure Raasay 3.14: The summit trig(onometical) point or triangulation station at 444m OD on Dùn Caan provides a spectacular panorama of Raasay, and beyond.

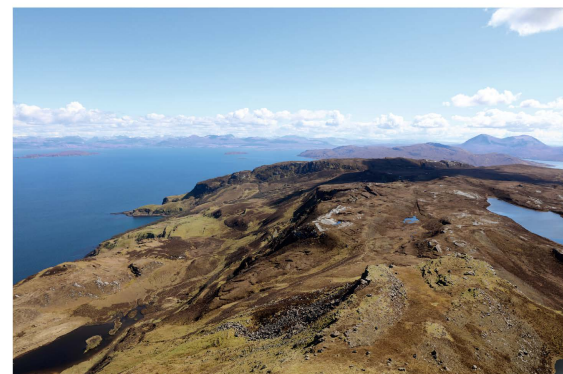
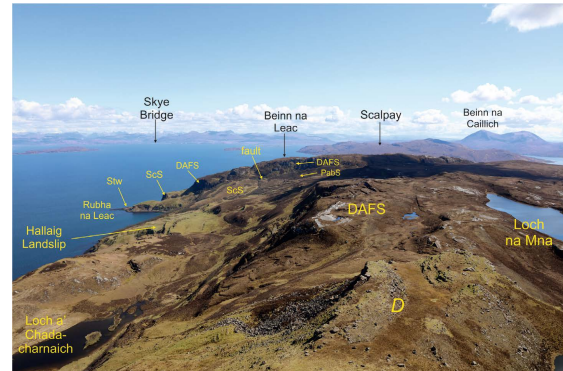


Figure Raasay 3.15: View south from Dùn Caan:
D: dolerite sill (Paleocene);
DAFS: Druim an Fhuarain Sandstone Member (Barreraig Sandstone Formation) (Middle Jurassic);
ScS: Scalpay Sandstone Formation (Lower Jurassic);
PabS: Pabay Shale Formation (Lower Jurassic);
Stw: Stornoway Formation (New Red Sandstone; Triassic).



Figure Raasay 3.16: View south from Dùn Caan to Rubha na Leac, composed of Triassic Stornoway Formation (New Red Sandstone) strata, predominantly cobble conglomerates and sandstones, with calcretes.

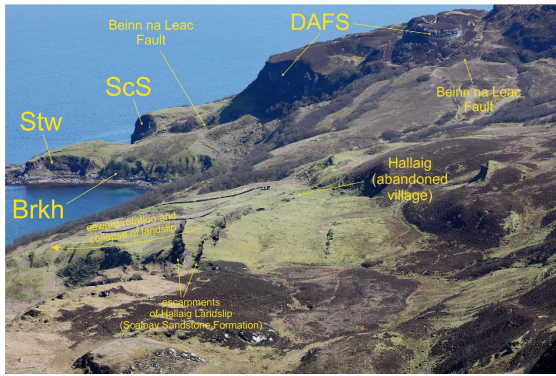


Figure Raasay 3.17: View south from Dùn Caan towards Rubha na Leac. The minor escarpments formed by the Hallaig Landslip indicate the rotation motion of the (still active) landslip towards the coast (east).

DAFS: Druim an Fhuarain Sandstone Member (Berreraig Sandstone Formation) (Middle Jurassic);
ScS: Scalpay Sandstone Formation (Lower Jurassic);
Brkh: Breakish Formation (Lower Jurassic);
Stw: Stornoway Formation (New Red Sandstone; Triassic).

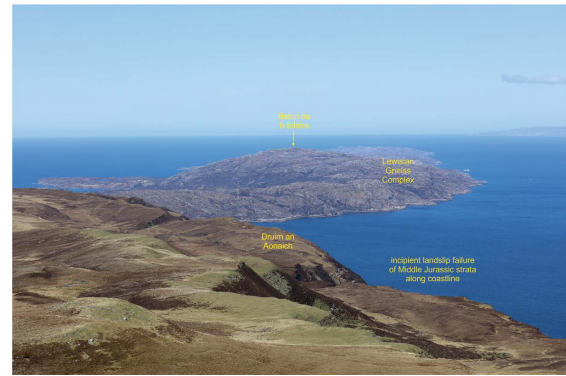


Figure Raasay 3.20: View NNE from Dùn Caan towards North Raasay. The middle ground comprises a coastal outcrop of Middle Jurassic strata, dominated by the inland cliff-forming Druim an Fhuarain Sandstone Member of the Berreraig Sandstone Formation. Incipient failure planes have developed, with the potential for landslips similar to those further south on the east coast of Raasay and along the inland escarpment of Trotternish on Skye. In the distance, the more subdued topography is the outcrop of the Lewisian Gneiss Complex.

Retrace the route to the start point.

End of excursion.

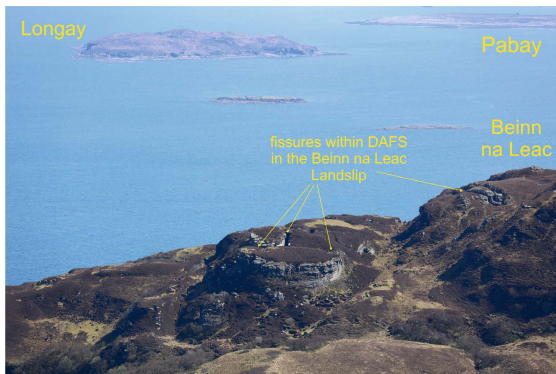


Figure Raasay 3.18: View south from Dùn Caan towards Beinn na Leac. Fissures within the Beinn na Leac Landslip indicate relatively recent movement.

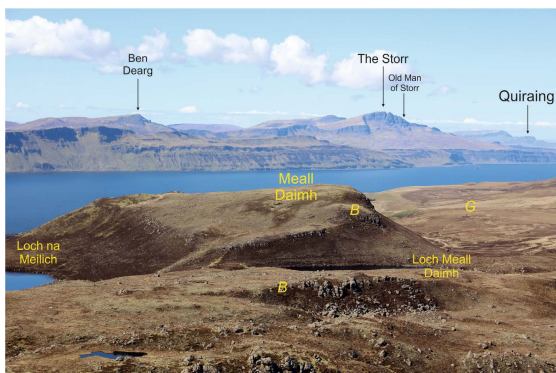


Figure Raasay 3.19: View NW from Dùn Caan towards Meall Daimh, composed of basaltic lavas, beyond which is poorly exposed Raasay Granite. In the distance, the inland escarpment of Trotternish is composed of landslipped Paleocene lavas, overlying Middle Jurassic strata. *B*, basaltic lavas; *G*, Raasay Granite.