

Strath 8:

Kilchrist to Camas Malag



The path between Kilchrist and Camas Malag, via the north coast of Loch Eishort and the east side of Loch Slapin, is a popular route for hill walkers and has the bonus of some easily accessed and varied geology. The views, throughout, are wonderful. Of added interest and worthy of thought are the abandoned villages of Boreraig and Suisnish.

Aspects covered: folded, metamorphosed Cambro-Ordovician Durness Group dolostones (marble); Paleocene dolerite dykes intruded into Durness Group dolostones; the Paleocene Beinn an Dubhaich Granite of the Eastern Red Hills Intrusive Centre; contact skarns; abandoned marble quarries; views of the Cambrian Loch Eriboll Sandstone Formation 'quartzites' on Sleat; Applecross Formation ('Torrionian') sandstones within the Kishorn Thrust Sheet; Triassic Stornoway Formation conglomerates; [abandoned village of [Boreraig](#)]; Lower Jurassic Ardnish Formation sandstones, siltstones, mudstones and limestones; Lower Jurassic Pabay Shale Formation strata; a Paleocene gabbro intrusion; [abandoned village of [Suisnish](#)]; a Paleocene layered picrite dyke; (Lower Jurassic sedimentary rocks); ?Triassic Camas Malag Formation lacustrine deposits (rhythmites); (the Beinn an Dubhaich Granite of the Eastern Red Hills Intrusive Centre); Holocene raised marine deposits; the Torrinn marble quarry.

Route: [Cill Chriosd Graveyard](#) – [Old Kilchrist Manse](#) (ruins) – [Kilchrist abandoned marble quarries](#) – [Allt na Pairte](#) – [Boreraig](#) – [Creag an Daraich](#) - [Suisnish](#) - [Stac Suisnish](#) – [Allt Poll a' Bhainne](#) - [Allt nan Leac](#) - [Allt na Garbhlain](#) - [Camas Malag](#) (- return [Cill Chriosd Graveyard](#)).

Distance: 18 kilometres (11 miles).

Time: 8 hours.

General comments: This excursion can be tailored to suit individual interests, leaving out some of the detailed localities towards the beginning and the end of the excursion, if required. At its most extreme, the excursion can be treated as a walk through the wonderful scenery of south Strath.

The localities to be examined along the east side of [Loch Slapin](#) are tide dependant and small sections of the path on the north side of [Loch Eishort](#) are near to the high-water line (although not usually a problem); therefore, the timing of the excursion should take these factors into account. It is, of course, possible to undertake the excursion in reverse (order) if this helps with route planning or tide restrictions.

The ruined post-Reformation [church](#) of [Cill Chriosd](#) (Kilchrist, Christ's Church) dates to the early 16th Century, replacing an earlier medieval church. The west gable is, in part, of medieval age. The church closed in 1840, enabling the landowner of much of Strath, Lord MacDonald, to clear the villages of [Suisnish](#) and [Boreraig](#) on [Loch Eishort](#), with the justification that they lived too far from the replacement church in [Broadford](#). Many of the graves belong to members of the Clan MacKinnon. One grave of note is located just inside the churchyard gate, a medieval slab with a floriated cross. The hillock beside the ruins is locally known as Cnoc na-Aifhreann, or the *Hill of the Mass*, and may be related to a legend that Saint Maelrubha held mass here for local inhabitants in the 7th Century.

[Loch Cill Chriosd](#) (Kilchrist) is on the north side of the Broadford-Elgol (B8083) road, 5km (3 miles) SW of [Broadford](#). Parking is available on the south side of the road, opposite the [Cill Chriosd Graveyard](#).

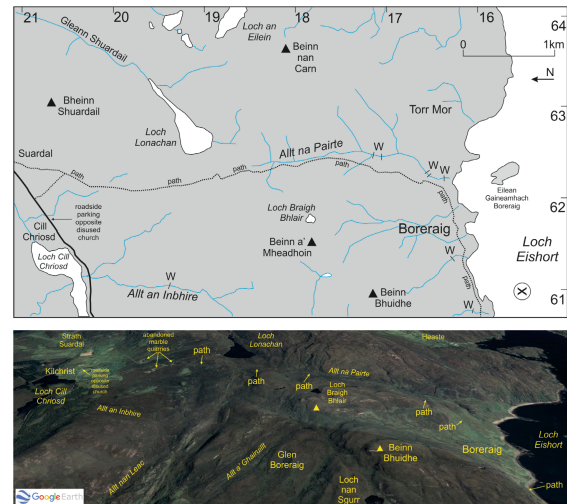


Figure Strath 8.1: Route map and oblique Google Earth® image of section between Kilchrist and Boreraig.

From the graveyard, walk c. 500m SW along the road to the lochside where, on the south side of the road, a [30m-thick dolerite dyke](#), the Kilchrist Dyke, forms a prominent feature. Proceed SE along the ridge formed by the dyke, noting 50m SE from the road (beneath electric power cables) a c. 75m-long, elongate enclosure of relatively undisturbed, well-bedded, metamorphosed Cambro-Ordovician Durness Group dolostones. Continue to the vantage point of the SE end of this part of the intrusion.

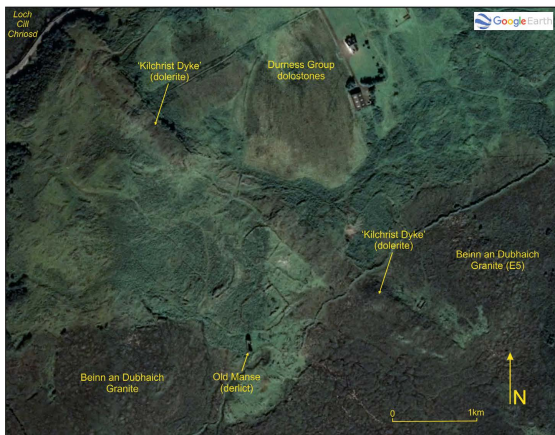
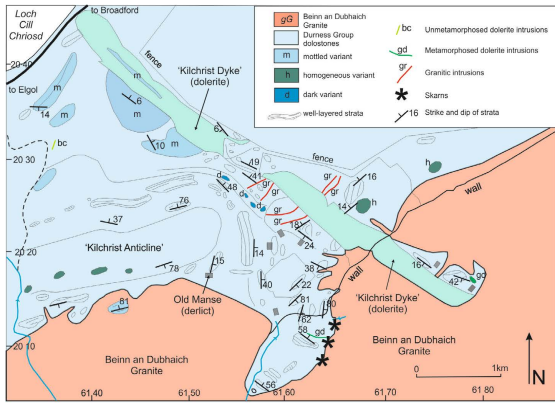


Figure Strath 8.2: Summary map and annotated Google Earth® image of the area around the Old Kilchrist Manse.

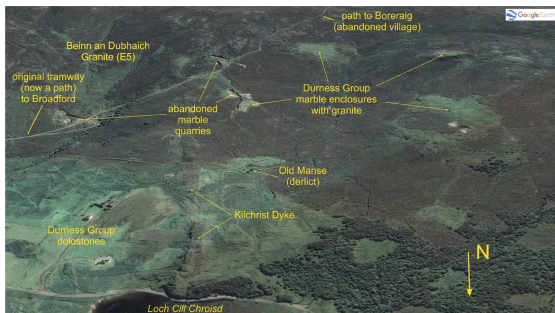


Figure Strath 8.3: Annotated oblique Google Earth® image of the area around the Old Kilchrist Manse.



Figure Strath 8.4: SW margin of the Kilchrist Dyke (left), against Durness Group dolostones (right).

Locality 1 [NG 6150 2025]:

From here, the following features may be noted and examined:

(a) A distinct vegetation change marking the boundary between the heather-covered ground of the Beinn an Dubhaich Granite and the grass-covered ground of the dolostones;



Figure Strath 8.5: Contrasting vegetation of the heather-covered granite (far ground) and the grass-dominated dolostones (foreground).

(b) In the dolostones, to the SW of the dyke, the closure of the Kilchrist Anticline, which plunges ENE at a shallow angle. The deformation events associated with this structure pre-date the intrusion of the dolerite dyke. Furthermore, the marbles show an even earlier deformation episode in the form of boudinaged calc-silicate layers (originally chert) in the hinge of the anticline;



Figure Strath 8.6: The Kilchrist Anticline, NE of the Old Kilchrist Manse. View looking towards the SE. Old Manse for scale.



Figure Strath 8.7: Detail of the hinge of the Kilchrist Anticline, plunging at a shallow angle towards the NE. Person for scale.



Figure Strath 8.8: Typical Durness Group dolostones within the Kilchrist Anticline. Pole c. 1m long.



Figure Strath 8.9: Detail of Durness Group dolostones within the Kilchrist Anticline, with boudinage structure. Lens cap c. 80mm across.

(c) An apophysis of the dolerite dyke, trending ESE, terminating just before the fence;



Figure Strath 8.10: Apophysis of the Kilchrist Dyke. Fence posts for scale.

(d) Also visible from this vantage point, on the higher ground further to the SE and surrounded by the granite, are spoil heaps associated with abandoned marble quarries (see Locality 3, below). Proceed SE onto the continuation of the dolerite dyke and note on the SW side of the intrusion the following two features:

(e) 1–2mm-wide veins of buff-coloured, coarse-grained - granite, terminating in the marble;

(f) A small anticline, plunging to the west, within the dolostones.

Continue SE along the dyke to the granite-dolostone contact where it is cut and veined by the granite.

Locality 2 [NG 6167 2008]:

Along the distinctive granite-dolostone boundary, contact skarns are locally developed. All are magnetite-dominated. Also present are two deformed, metamorphosed dolerite dykes which are truncated by the younger granite. The skarns are located:

1. SSW of a small waterfall; enclosed within the granite,
2. SW of a deformed, metamorphosed dolerite dyke;

3. 2m SW of a poorly fenced-off, water-filled shaft. This skarn contains obvious malachite. Scattered rock-debris provides good material for examination, without recourse to damaging the very limited outcrop.



Figure Strath 8.11: Contact between granite (left-hand side) and dolostone (right-hand side).



Figure Strath 8.12: Metamorphosed dolerite dyke in country-rock dolostones, truncated by heather-covered granite. Margin of granite marked by pole (c. 1m long).

Proceed SE across the granite for c. 300m to the spoil heaps of a small, disused marble quarry.

Locality 3 [NG 6191 1977]:

Within the abandoned quarry are spoil heaps that provide good material for examination. The south face of the quarry is marked by a vertical contact of the granite and the enclosure of marble.



Figure Strath 8.13: Abandoned marble quarry, surrounded by granite, SE of Old Kilchrist Manse.



Figure Strath 8.14: Water drainage channel of abandoned marble quarry, SE of Old Kilchrist Manse.

Inward from the margin of the granite, the first 4–5cm is depleted in mafic minerals, before giving way to a concentrated zone of dark, alkali-rich pyroxenes.

The original dolostone was chert-bearing and, in the NE side of the quarry, prominent boulders contain good examples, particularly obvious on weathered surfaces. Subsequent thermal metamorphism by the granite in the Paleocene lead to the formation of the marble with various new silicate minerals. The marble was originally rich in forsterite, formed by high-grade thermal metamorphism adjacent to the granite, but subsequently hydrated to serpentine, giving the rock a patchy-developed distinctive yellow-green coloration. Dark aggregates of brucite, after original (metamorphic) periclase, are also common. During the thermal metamorphism, concentric zones of metamorphic minerals developed at the chert-dolostone boundaries, and, in consequence, the rock has a prominent 'spheroidal' appearance.



Figure Strath 8.15: Typical marble within the abandoned quarry SE of Old Kilchrist Manse, with remnants of chert nodules surrounded by concentric zones containing silicate minerals, mainly forsterite (Mg-rich olivine), now retrogressed (hydrated) to serpentine, and diopside. Coin c. 24mm across.

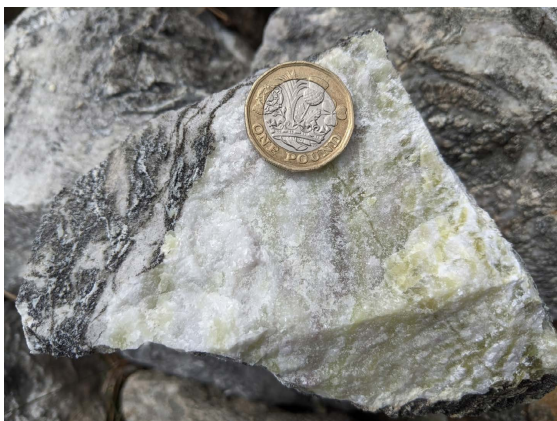


Figure Strath 8.16: Typical fresh surface of marble, with distinctive yellow-green serpentine after forsterite. Coin c. 24mm across.

From the quarry, head SE to the [Marble Line Path](#) and go north for c. 400m to the abandoned quarries at the side of the track.

The abandoned marble quarries at the eastern end of the Beinn an Dubhaich Granite were worked for architectural dimension stone, blocks and slabs, and used in buildings such as Iona Abbey and Armadale Castle, the latter in Sleat, SE Skye. The enterprise started in the first decade of the 20th Century, with an on-site processing plant close to [Loch Cill Chrìosd](#) for cutting and polishing material, which was then transported 3 miles (5km) to the pier at [Broadford](#) on a narrow gauge (914mm or 3 feet) railway. Horses initial provided the pulling power, but were replaced briefly by steam power. The operation closed in 1912. The infrastructure of the operation (houses, a shop and a club) were demolished, the railway line was lifted, and the train disposed of. The locations of the upper and lower railway lines are still visible, the upper marked by the so-called [Marble Line Path](#). Still preserved on-site items of interest include remnants of some buildings,

including the crushing plant and the base of a cable winch.



Figure Strath 8.17: Skye Marble display board, Kilchrist.



Figure Strath 8.18: Workers, Skye marble quarry.

Head south along the path towards [Loch Eishort](#). *En route*, Cambro-Ordovician dolostones, Late Proterozoic Applecross Formation ('Torridonian') sandstones and Triassic Stornoway Formation conglomerates are exposed on or very near to the path. The 'quartzite' ridge of [Sgiath-bheinn an Uird](#) (Cambro-Ordovician Loch Eriboll Sandstone Formation) on Sleat comes into view.



Figure Strath 8.19: Path south towards Boreraig, and onwards to Suisnish.



Figure Strath 8.20: Cambro-Ordovician Durness Group dolostones surrounded by Paleocene Beinn an Dubhaich Granite, from the Borerraig path. View towards the west, with the Cuillin Hills in the distance.



Figure Strath 8.23: View south towards the 'quartzite' ridge of Sgiath-bheinn an Uird (Cambrian Loch Eriboll Sandstone Formation) on Sleat, from the Borerraig path adjacent to the Allt na Pairte.



Figure Strath 8.21: View north towards Loch Kilchrist and the Beinn na Caillich Granite, from the Borerraig path. Cambro-Ordovician Durness Group dolostones in the foreground.



Figure Strath 8.24: Reddish-brown Late Proterozoic Applecross Formation ('Torrionian') sandstone within the Kishorn Thrust Sheet, with cross-stratification and rippled surfaces, close to (west of) the Borerraig path.



Figure Strath 8.22: View NE from the Borerraig path towards Loch Lonachan, with Bheinn Shuardail (Beinn Suradal), composed of Cambro-Ordovician Durness Group dolostones, beyond.



Figure Strath 8.25: Triassic Stornoway Formation conglomerate, with abundant clasts of Cambro-Ordovician Durness Group dolostone and Late Proterozoic Applecross Formation ('Torrionian') sandstone, adjacent to the Borerraig path. Pole c. 1m long.



Figure Strath 8.26: Jointed surface of microgranite intrusion, part of a suite of composite sills associated with the Eastern Red Hills Intrusive Centre, on the Boreraig path. Pole c. 1m long.



Figure Strath 8.27: Inclined microgranite intrusion, part of a suite of composite sills associated with the Eastern Red Hills Intrusive Centre, west of the Boreraig path and directly north of the abandoned village of Boreraig.



Figure Strath 8.28: View SE towards the 'quartzite' ridge of Sgiath-bheinn an Uird (Cambrian Loch Eriboll Sandstone Formation) on Sleat, from Boreraig. The low ground on the near side of the ridge comprises poorly exposed Late Proterozoic Applecross Formation ('Torridonian') strata and various Cambro-Ordovician stratigraphic units in a complex thrust arrangement within the Moine Thrust Zone.

On the north side of [Loch Eishort](#) are the abandoned villages of [Boreraig](#) and [Suisnish](#), cleared in the 1850s.

Archibald Geikie, one-time director of the Geological Survey of Great Britain, recalled in his memoirs when surveying the area:

'A strange wailing sound reached my ears. I could see a long and motley procession winding along the road that led north from Suisnish. There were old men and women, too feeble to walk, who were placed in carts; the younger members of the community on foot were carrying their bundles of clothes while the children, with looks of alarm, walked alongside. A cry of grief went up to heaven, the long plaintive wail, like a funeral coronach. The sound re-echoed through the wide valley of Strath in one prolonged note of desolation.'

Apparently, the landowner of the time, Lord MacDonald, felt that the villagers lived too distant from the church at Broadford, and was fearful for their souls. The inhabitants spoke only Gaelic.

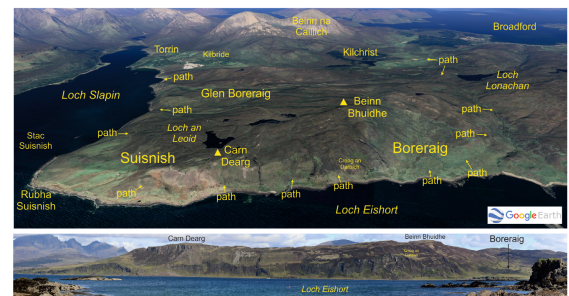
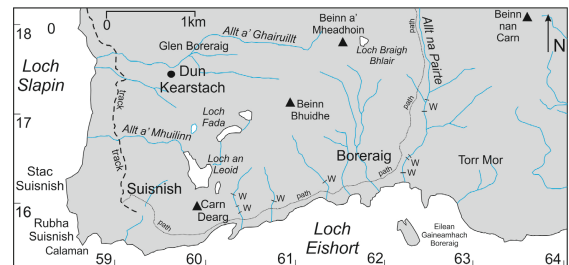


Figure Strath 8.29: Route map, oblique Google Earth® image and panorama photograph (from Ord) of the section between Boreraig and Suisnish.



Figure Strath 8.30: Remains of buildings and walls of the abandoned village of Boreraig. In the distance is Rum, dominated by Paleocene intrusive rocks of the Rum Central Complex.

The section of the route along the north side of [Loch Eishort](#), from [Boreraig](#) to [Suisnish](#), is dominated by cliffs of Lower Jurassic Pabay Shale Formation strata intruded by NW-SE -trending dykes of the Paleocene regional swarm. At the [Boreraig](#) end of the traverse, Lower Jurassic Ardnish Formation sandstones, siltstones, mudstones and limestones form a raised marine platform, surmounted by remnants of the *Dùn Boreraig* Iron Age fort. Towards the [Suisnish](#) end of the traverse is a Paleocene gabbro intrusion with near-vertical margins, forming a conspicuous set of crags.

Proceeding east, the island of Rum comes into view, followed by [Strathaird](#) and the Cuillin Hills.



Figure Strath 8.31: Foreshore sequence of sandstones, siltstones, mudstones and limestones of the Lower Jurassic Ardnish Formation forming a raised marine platform on the north side of Loch Eishort. View is towards the west, with the crags of Creag an Daraich comprising a c. 140m thick sequence of Pabay Shale Formation strata intruded by dykes of the Paleocene NW-SE -trending regional swarm in the distance.



Figure Strath 8.32: Inclined intrusive sheet of jointed dolerite within Lower Jurassic Ardnish Formation strata east of the Allt a' Chreagain on the west side of Boreraig. In the distance is an inclined microgranite intrusion, part of a suite of composite sills associated with the Eastern Red Hills Intrusive Centre.



Figure Strath 8.33: Inclined microgranite intrusion, part of a suite of composite sills associated with the Eastern Red Hills Intrusive Centre, directly north of the abandoned village of Boreraig.



Figure Strath 8.34: Lower Jurassic Pabay Shale Formation strata in the Allt Cul an Dùin, east of Boreraig. Dykes of the Paleocene NW-SE -trending regional swarm form prominent linear features on the hillside.



Figure Strath 8.35: Foreshore sequence of sandstones, siltstones, mudstones and limestones of the Lower Jurassic Ardnish Formation forming a raised marine platform on the north side of Loch Eishort. View is towards the east, from *Dùn Boreraig*.



Figure Strath 8.36: Multiple dolerite dyke intruded into Pabay Shale Formation strata on north shore of Loch Eishort. Iain Allison for scale.



Figure Strath 8.39: Dolerite dykes intruded into Pabay Shale Formation strata, north side of Loch Eishort.



Figure Strath 8.37: Dolerite dykes intruded into Pabay Shale Formation strata on north shore of Loch Eishort.



Figure Strath 8.40: Carbonate concretions in Pabay Shale Formation strata, north side of Loch Eishort. Pole c. 1m long.



Figure Strath 8.38: Pabay Shale Formation with courses of carbonate concretions, north side of Loch Eishort.



Figure Strath 8.41: Detail of a carbonate concretion in Pabay Shale Formation strata, north side of Loch Eishort. Pole c. 1m long.



Figure Strath 8.42: Weathered, coarse-grained dolerite at eastern margin of gabbroic intrusion where crossed by path, south of Càrn Dearg, north side of Loch Eishort.



Figure Strath 8.43: View towards the east, on the north side of Loch Eishort, with reddish-brown, block-jointed gabbro in the near ground and dark Pabay Shale Formation strata, beyond.

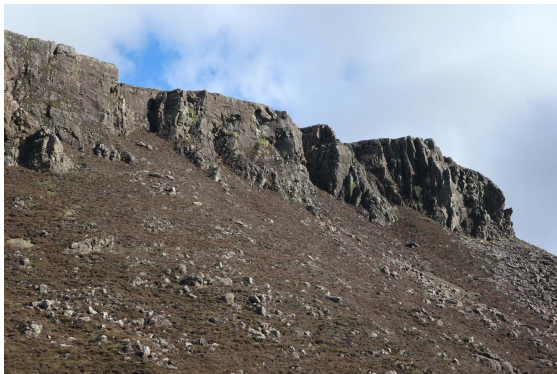


Figure Strath 8.44: Crags of reddish-brown, block-jointed gabbro south of the summit of Càrn Dearg, north side of Loch Eishort.



Figure Strath 8.45: Pabay Shale Formation strata SE of Suisnish, north side of Loch Eishort. View is towards the west, with Strathaird (right of middle), and Rum (left of middle) in the distance.



Figure Strath 8.46: The Cuillin Hills, across Loch Slapin from Suisnish. View is towards the west. The wooded ground with houses is Kilmarie on the east side of Strathaird. Sgùrr na Stri is the rounded summit below the skyline of the Cuillin Hills.



Figure Strath 8.47: Ben Meabost, comprising Middle Jurassic Great Estuarine Group strata with a cover of Paleocene lavas, on Strathaird. Beyond are the cloud-capped southern peaks of the Cuillin Hills. View is towards the west from Suisnish.

Follow the path west through the remains of the abandoned village of [Suisnish](#), and then north on the track for a short distance along the east side of [Loch Slapin](#). To the west of the path is the minor promontory and sea stack, [Stac Suisnish](#). An obvious WNW-ESE – trending ridge marks the outcrop of a dyke, only well

exposed on the shore at [Stac Suisnish](#). Follow the minor ridge marking the inland exposure of the dyke west to [Stac Suisnish](#).

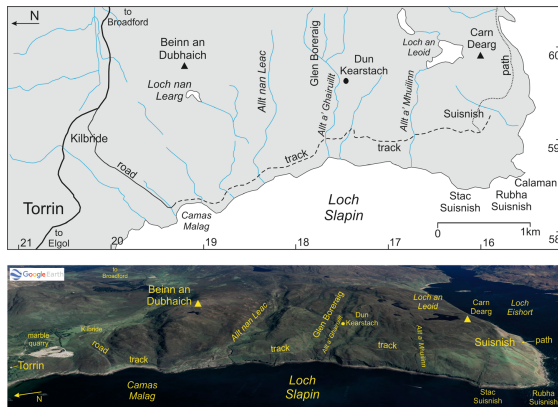


Figure Strath 8.48: Route map and oblique Google Earth® image of section between Suisnish and Torrinn.

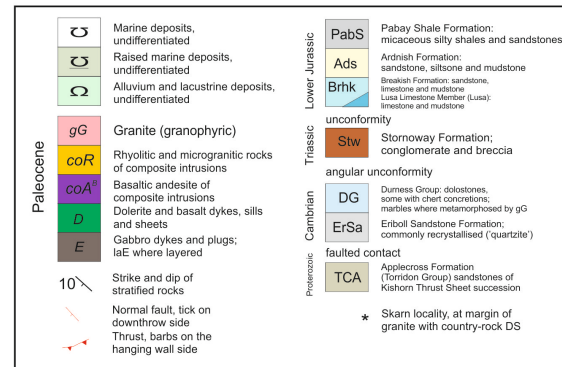
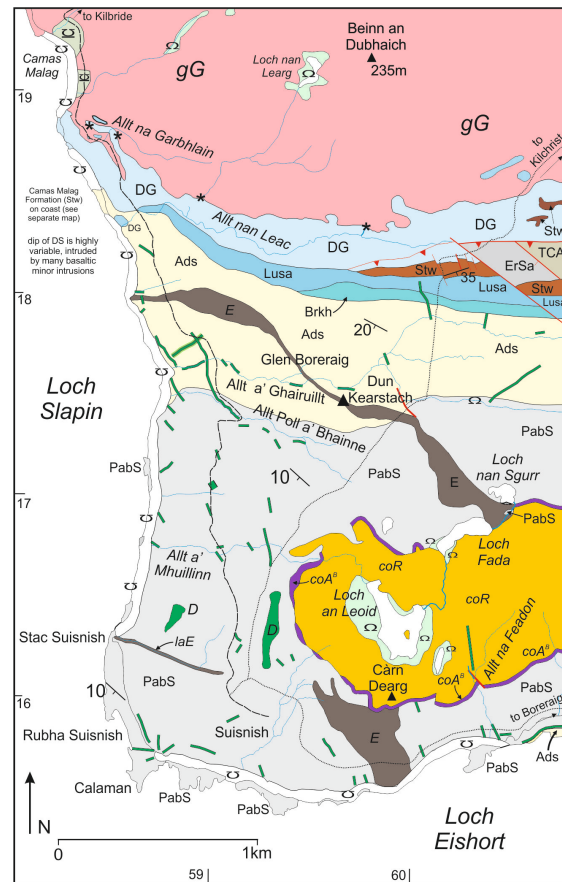


Figure Strath 8.49: Summary geological map of the east side of Loch Slapin, from Suisnish to Kilbride.



Figure Strath 8.50: Annotated Google Earth® image of the Beinn an Dubhaich area. [E: gabbro; gG: Beinn an Dubhaich Granite; laE: layered gabbro (dyke)].



Figure Strath 8.51: Annotated oblique Google Earth® image of the Beinn an Dubhaich area. [Ads: Ardnish Formation; DG: Durness Group dolostones; E: gabbro; ErSa: Eriboll Sandstone Formation; gG: Beinn an Dubhaich Granite; laE: layered gabbro (dyke); Lusa: Lusa Limestone Member; PabS: Pabay Shale Formation; Stw: Stornoway Formation; TCA: Applecross Formation (Torridon Group)].

Locality 4 [NG 5850 1628]:

At [Stac Suisnish](#), the main feature is a layered, dyke-like intrusion of picrite, 30-40m wide, emplaced into strata of the Lower Jurassic Pabay Shale Formation. This coarse-grained, olivine-rich intrusion has well developed layering, defined by the proportions of olivine, clinopyroxene and plagioclase. Autoliths of early crystallised material also define the stratification of the intrusion. Various mechanisms may be applied to explain the origin of the layered nature of the intrusion, with gravitational-assisted accumulation being the most likely due to the development of the layers of autoliths.



Figure Strath 8.52: Inclined layers within the Stac Suisnish Dyke, on the south side of the main exposure above the High-Water Line of Loch Slapin. Layers are defined by both differing proportions of the main mafic minerals (olivine and clinopyroxene) and plagioclase, and by the presence of thin intervals of autoliths. Pole c. 1m long.

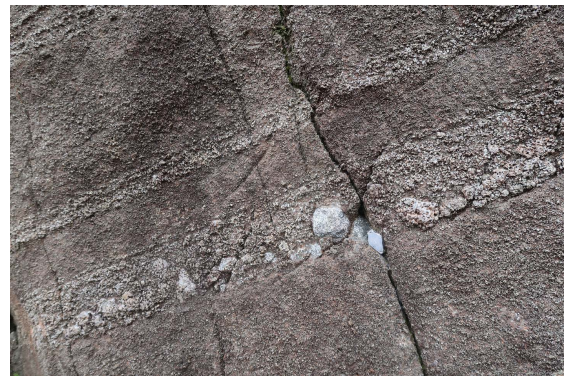


Figure Strath 8.53: Detail illustrating the layers within the Stac Suisnish Dyke, defined by mineral proportions and autoliths. Length of hand lens c. 50mm.

To the north and south of the dyke, gently-inclined strata of the Pabay Shale Formation crop out along the shore of [Loch Slapin](#). These sandy, micaceous shales were deposited in relatively deep marine water, indicated by their benthic fauna, including ammonites and belemnites. Calcareous concretions ('doggers') of diagenetic origin are relatively common, crudely defining stratification. Inland exposures are uncommon, but do occur on the [Camas Malag – Suisnish](#) track.



Figure Strath 8.54: View towards the north from Stac Suisnish, with inclined Pabay Shale Formation strata.

Continue north for c. 2km. *En route* are minor track-side exposures of the Pabay Shale Formation.

Locality 5 [NG 5877 1796]:

Here, crossing the path, is the outcrop of an olivine gabbro macro-dyke, forming an obvious topographic feature. Exposure of fresh material is typically poor, except on the shore of Loch Slapin. Inland, this steep-sided intrusion widens and forms a prominent ridge running ESE into Glen Boreraig, and upon which is located *Dùn Kearnstach*.

Continue north for c. 500m along the track to where it crosses the [Allt nan Leac](#). Access the shore of [Loch Slapin](#) and head NW along the coast for c. 100m to [\[NG 5847 1842\]](#). Here, the Cambro-Ordovician dolostones are unconformably overlain by inclined, well-bedded Lower Jurassic limestones, sandstones and shales.

Locality 6 [NG 5847 1842]:

The angular unconformity separating the Cambro-Ordovician Durness Group dolostones and the overlying Lower Jurassic strata of the Ardnish Formation occurs where the clint and gryke pavement of the former gives way to the predominantly heather-covered ground of the distinctly stratified latter. Directly north of the mouth of the [Allt nan Leac](#) is a c. 60m-wide inlier of the dolostones, exposed above the High-Water line. Unconformably above the dolostones of the inlier, the Lower Jurassic sedimentary rocks comprise thin limestones and shales (shell beds) containing chert debris and common *Gryphaea (arcuata)* (an oyster, commonly referred to as the Devil's toenails) and the bivalve, *Oxytoma*, together with laminated sandy shales and sandstones that contain the ammonite *Arnioceras*.



Figure Strath 8.55: Inlier of Cambro-Ordovician Durness Group dolostones, overlain by west-dipping, fossiliferous Lower Jurassic Ardnish Formation limestones and shales. The sea-cliffs in the distance are composed of Pabay Shale Formation strata. View towards the south.



Figure Strath 8.56: Fossiliferous Lower Jurassic Ardnish Formation shales on the south side of the inlier of Cambro-Ordovician Durness Group dolostones on the shore of Loch Slapin, with abundant *Gryphaea (arcuata)* and *Oxytoma*. Pole c. 1m long.

An optional **Locality 7** occurs on the shore of Loch Slapin at [\[NG 5837 1863\]](#), where the [Allt na Gabhlain](#) enters [Loch Slapin](#). Access is c. 350m NW along the beach from where the [Allt nan Leac](#) enters [Loch Slapin](#) and requires low-tide conditions.

Locality 7 [NG 5837 1863]:

On the beach where the [Allt na Gabhlain](#) enters [Loch Slapin](#), the Triassic Camas Malag Formation crops out. These locally preserved, thinly bedded sandstones, siltstones, mudstones and conglomerates are non-fossiliferous and represent lacustrine and alluvial fan deposits. They dip at 25–35° to the west and are best examined on the near-vertical back wall of the beach and at the top of the sea-cliff. These strata appear to be preserved within lows (grykes) of the palaeo-karst surface of the Durness Group dolostones.

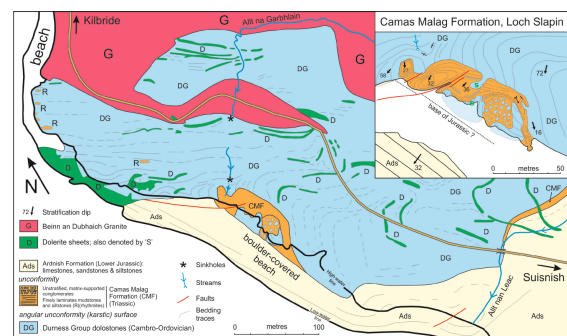


Figure Strath 8.57: Geological map showing the location of the Camas Malag Formation, unconformably overlying deformed Cambro-Ordovician Durness Group dolostones intruded by dolerite dykes and sheets.



Figure Strath 8.58: Thinly-bedded, contorted siltstones (rhythmites) of the Triassic Camas Malag Formation at the top of the coastal cliff on the east side of Loch Slapin.

Return SE along the coast to the [Allt nan Leac](#) and uphill to where the track crosses the [Allt nan Leac](#). Continue NW along the track for c. 400m to where it crosses the [Allt na Garbhlain](#). On the seaward side of the track, the [Allt na Garbhlain](#) disappears into a sink, part of an extensive cave system within the Durness Group dolostones.



Figure Strath 8.59: Sink where the Allt na Garbhlain disappears into the cave system within the Durness Group dolostones (marbles). Iain Allison for scale.

The headland NW of the [Allt na Garbhlain](#) (on the [Loch Slapin](#) side of the track) comprises Cambro-Ordovician Durness Group dolostones intruded by Paleocene dolerite and basalt dykes of the NW-SE -trending regional swarm. To the north is the Paleocene Beinn an Dubhaich Granite.

Locality 8 [\[NG 5825 1885\]](#):

This headland is partly composed of dolostones, giving way, to the north of a [prominent gully](#), the granite. These impure carbonates have been partially recrystallised to calc-silicate -bearing marbles by the granite and have undergone substantial de-dolomitisation. Throughout these steeply-dipping, fine-bedded, alternating pale- and dark-banded rocks are chert nodules that have reacted to varying extents with the carbonate matrix during thermal metamorphism, producing concentric bands of calc-silicate minerals, including: talc, tremolite, diopside, serpentine after forsterite, and brucite after periclase. The chert within the dolostones appears to be of

diagenetic origin, rather than depositional, and may replace original features such as burrows and stromatolites.

The dolostones are cut by dykes, some deformed, of the Paleocene NW-SE -trending regional swarm. These commonly near-vertical minor intrusions are typically less than 1m wide and are predominantly composed of basalt and dolerite. One obvious feature of the dykes is the development of boudin structures, with the necks of the individual boudins exhibiting significant amounts of thinning. The dykes have well-developed chilled margins, even within the necks, suggesting that cooling was contemporaneous with deformation. Little, if any, penetrative fabric of tectonic origin is present within these dykes, in contrast with the country-rock dolostones, which locally contain cleavages that are deflected into the boudin necks. It is likely that these dykes were intruded whilst the district was being subjected to radial compressive forces, during the emplacement of the nearby granite(s). A good example of these relationships is shown by the third dyke that crops out on the headland south of the near-vertical granite-dolostone contact. 10m south of this dyke, good examples of large chert nodules within the marbles may be examined.

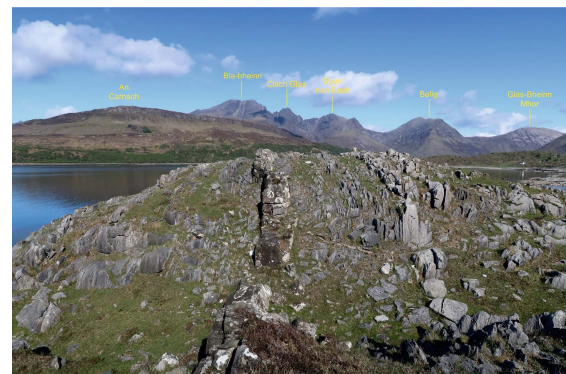


Figure Strath 8.60: Dolerite dyke within vertically bedded Cambro-Ordovician Durness Group dolostones. View is west across Loch Slapin to (left-to-right) An Càrnach, Blà-bheinn, Clach Glas, Sgùrr nan Each, Belig and Glas-Bheinn Mhòr.

Follow the track north to [Camas Malag](#).

Locality 9 [\[NG 5826 1926\]](#):

At [Camas Malag](#), a Holocene raised marine/beach platform lies immediately to the NE of the present-day beach. The cobbles and sand of this platform can be examined in the banks of the small stream directly to the SW of the [small bridge](#) at the western end of the bay. Cobbles of the following rock-types are identified readily: granite, basalt, dolerite, gneiss, schist, ('Torridonian') sandstone, (Cambro-Ordovician) dolostone, and (Jurassic) sandstone, limestone and shale. The wave-cut platform at the NW end of the [Camas Malag](#) is composed of the Beinn an Dubhaich Granite, a slightly porphyritic granite containing phenocrysts of alkali feldspar and quartz. The main mafic minerals are hornblende and

biotite. Rare, fine-grained, mafic inclusions, typically rounded and up to 5cm across, are dispersed throughout this intrusion.



Figure Strath 8.61: Camas Malag on the east side of Loch Slapin, with the working marble quarry at Torrìn in the middle ground, and Glas-Bheinn Mhòr, Beinn na Crò and Beinn Dearg Mhòr (left-to-right) in the distance.

From [Camas Malag](#) take the rough, gated, public road to Kilbride, with good views of the marble quarry to the west. The bulk of the material is used as agricultural lime, pebble-dash for houses and ready-mixed concrete, with some decorative stone. Depending upon the state of the quarry it should be possible to see exposed faces with dark dolerite dykes within the pale dolostone from the Kilbride road.



Figure Strath 8.62: The working Torrìn marble quarry from the Kilbride road.

Continue to the Broadford-Elgol (B8083) road. From here it is 3km (2 miles) to the [Cill Chrìosd Graveyard](#).

End of excursion.