North Skye 10:

Rubha Hunish



The northern tip of Trotternish is dominated by thick Paleocene dolerite (s.l.) sills intruded into Middle Jurassic sedimentary rocks. These sills belong to the Little Minch Sill Complex, part of which is preserved on the Shiant Isles (Na h-Eileanan Mòra; the big isles). Hunish is built almost entirely of these sills, with only a minor amount of the country-rock strata preserved/exposed. Along this coastline are examples of simple thick prismatic-jointed sills, sills with intricate joint patterns, and a sill with a complex layered structure. The walk out to Rubha Hunish is delightful and mostly free of tourists, giving you space to enjoy the solitude and spectacular views, especially towards dusk in the Spring.

Aspects covered: Paleocene sills intruded into (thermally metamorphosed) Middle Jurassic strata; coastal features (rock pillars/stacks, sea arches, geos).

Route: <u>Duntulm (Shulista road-end) – Blàr Stamanaig – Meall Tuath – Hunish – Rubha Hunish – Boda Hunish – Port Lag a' Bhleodhainn – Meall Tuath – Meall Deas – Erisco (- return Shulista road-end).</u>

Distance: 8 kilometres (5 miles).

Time: 4/5 hours.

General comments: High cliffs are involved that are not tide-dependant. If the <u>Hunish</u> platform is included (see below), low tide conditions are not essential. The path from <u>Meall Tuath</u> onto <u>Hunish</u> is located in a steep (but passable via a crude path) gully. Care needs to be exercised on this path. This is a remote part of Skye, with spectacular cliffs and wonderful views of the <u>Shiant Isles</u>, and beyond to Lewis and Harris of the Outer Hebrides. A visit in the later part of the day may be rewarded by a spectacular sunset.

Parking is available on the minor road to <u>Shulista</u>. From <u>Staffin</u>, head north on the main (A855) road for 12 km (8 miles), through <u>Kilmaluag</u>. Take the <u>minor road</u> on the right (north), signposted <u>Shulista</u>. There is a red telephone box at the <u>junction</u>. A short distance along this road there is a <u>parking area</u> on the right (east) side.

Cross the road north of the cattle grid and take the good path NW, past the sheep fank, to <u>Blar Stamanaig</u> and onwards towards <u>Meall Tuath</u>. En route, the path goes through a gate in a wire fence. The path skirts around the west side of <u>Meall Tuath</u> to a <u>bothy</u> that has a spectacular view across <u>Hunish</u>, below, to <u>Rubha Hunish</u>, and out across the Minch: a spectacular panorama, which explains the former use of the bothy as a coastguard station.

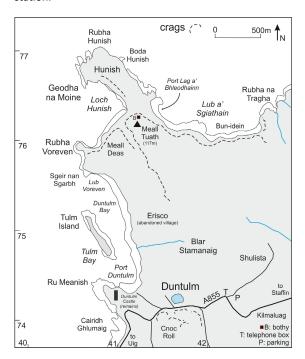


Figure North Skye 10.1: Location map for the Duntulm – Rubha Hunish area.



Figure North Skye 10.2: Annotated Google Earth® image for the Rubha Hunish area.

Locality 1 [NG 4125 7625]:

The view from the headland (at the bothy) to the north across the Minch is towards Lewis and Harris, the northernmost part of the Outer Hebrides. The Outer Hebrides are composed of Archaean basement gneisses, the Lewisian Gneiss Complex. Closer, forming a cluster of islands in the Minch, are the Shiant Isles (Na h-Eileanan Mòra), dominated by thick intrusions of the Paleocene Little Minch Sill Complex. Virtually all of Hunish and the area as far south as Duntulm are composed of these sills. Closer to Skye, to the NW, is a cluster of small islands, Fladaigh Chuain, Gaelavore Island, Gearran Island and The Cleats, comprising remnants of a sill, possibly the same sill that forms Hunish.



Figure North Skye 10.3: Hunish, almost devoid of rock exposure and partially covered by raised beach deposits. Depending upon lighting conditions and direction of view, the lazy beds constructed for the growing of crops are obvious, comprising parallel ridges of soil, peat and desalinated seaweed.



Figure North Skye 10.4: Rubha Hunish and the small islands of Fladaigh Chuain, Gaelavore Island, Gearran Island and The Cleats.

Before descending to the peninsula of <u>Hunish</u>, head SE to the east side of <u>Meall Tuath</u>, towards the cliff-top, where the coastline between <u>Port Lag a' Bhleodhainn</u> and <u>Rubha na Tragha</u> is visible.

Locality 2 [NG 4148 7614]:

The cliff above <u>Lùb a' Sgiathain</u> ('the Bay of the Wing') reveals a spectacular example of the complexity of columnar joints in igneous bodies. At its simplest, these Excursion North Skye 10: Rubha Hunish

joints should form orthogonal to the cooling surface, i.e. the surface through which heat is lost. In this instance, with sweeping curved sets of columns, the cooling history must have been (more) complicated, possibly due to multiple intrusion. The entire *c.* 100m of the cliff face is made of sill rock, based upon other (accessible) locations composed of olivine dolerite, but with some thin intervals richer in olivine and referred to as picrodolerite.



Figure North Skye 10.5: The cliff-fringed coast of Lùb a' Sgiathain (the Bay of the Wing) with its locally complex columnar joints within the *c.* 100m section through an olivine dolerite sill(s).



Figure North Skye 10.6: Detail of the fanning-out columnar joints within the *c.* 100m section at Lùb a' Sgiathain.

Return to the <u>bothy</u> and follow the path SW to where it drops down into a trench-like feature between <u>Meall Tuath</u> and <u>Meall Deas</u>. On the far side, before the path climbs up out of the trench, there are some gates in various states of repair. Most obvious is a large boulder. This is where the <u>path descends</u> steeply to <u>Hunish</u>. Do not attempt if you are not comfortable with the steep slope.



Figure North Skye 10.7: Notch in the coastline between Meall Tuath and Meall Deas, possibly due to NW-SE - trending dykes of the Paleocene regional swarm. On the left-hand (SW side) side of the notch there is a path that accesses Hunish, below. The cluster of islands, Fladaigh Chuain, Gaelavore Island, Gearran Island and The Cleats are composed of sill rock.



Figure North Skye 10.8: Location of the path from the cliff top, down to Hunish, most easily recognised from the position of the solitary boulder at the top.



Figure North Skye 10.9: Location of the path from the cliff top, down to Hunish, most easily recognised from the position of the solitary boulder at the top.

The top surface of <u>Hunish</u>, a portion of the 17-30m high rock platform formed by Lateglacial coastal activity (glacio-isostatic uplift (rebound due to the retreat of the ice) and eustatic sea-level changes) during the interstade between 14.7 ka and 12.9 ka, has very little exposed rock and has a partial cover of raised beach material.

Descend the path to the <u>small hummocky exposures</u> of Jurassic strata on the SW side of the peninsula.

Locality 3 [NG 4111 7653]:

These fine-grained, laminated strata belong to the Middle Jurassic Great Estuarine Group, most likely the mudflat to lagoonal Duntulm Formation. Similar material occurs on the coastline north of Cairidh Ghlumaig, SW of Duntulm Castle (not part of this excursion). Due to intense thermal alteration, original small-scale details cannot be discerned.



Figure North Skye 10.10: Hunish, partially covered by raised beach deposits. The hummocky ground in the foreground is composed of Middle Jurassic Great Estuarine Group strata, most likely Duntulm Formation, and of limited lateral extent, caught up between two sills: the overlying olivine dolerite sill forms the cliffs of Meall Tuath and the underlying picrodolerite sill forms Hunish.



Figure North Skye 10.11: Thermally altered Middle Jurassic Great Estuarine Group strata, most likely Duntulm Formation, forming the hummocky ground close to the base of the path gully. Pole *c.* 1m long.

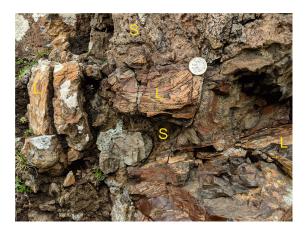


Figure North Skye 10.12: Detail of the thermally altered Middle Jurassic Great Estuarine Group strata, most likely Duntulm Formation, forming the hummocky ground close to the base of the path gully. Note the contorted lamination (L) of these disrupted hornfelsed strata, locally injected with vesiculated sill material (S).

Follow a clockwise circuit of the coastline: i.e. along the SW coast of <u>Hunish</u> to <u>Rubha Hunish</u>, then SE past <u>Bodha Hunish</u> towards <u>Port Lag a' Bhleodhainn</u>.



Figure North Skye 10.13: Annotated oblique Google Earth® image for the Hunish area. J: Jurassic strata; C: curved joint sets within picrodolerite sill; L: layered character of picrodolerite sill well developed.



Figure North Skye 10.14: View south to the cliffs below Meall Tuath. On the left in the near distance is the sea stack, Boda Hunish.



Figure North Skye 10.15: View south to the cliffs below Meall Tuath.

At <u>Rubha Hunish</u>, the joint sets within the <u>Hunish</u> picrodolerite sill have a complex, curved geometry, indicating a non-simple cooling history.



Figure North Skye 10.16: Curved joint sets within the picrodolerite sill forming most of Hunish, at Rubha Hunish.

Continuing around the coast to <u>Bodha Hunish</u>, the internal structure of the sill is well displayed on the rock pillar of that name and on the <u>Hunish</u> coastline, opposite.

Locality 4 [NG 4102 7688]:

From this vantage point, the layered nature of the lower part of this >20m-thick sill of picrodolerite (the base of the sill is not seen) is clearly visible, but not accessible. At least twenty flat-lying distinct dark layers, rich in clinopyroxene, can be seen in the cliff face. These bands are typically 20–30cm thick and alternate with lighter/paler layers, 70–80cm thick, which are richer in olivine, with lesser amounts of pyroxene. Plagioclase occurs throughout the layers. The upper part of the sill is not obviously layered and is accessible, where its olivine-rich character can be examined.



Figure North Skye 10.17: The sea stack of Bodha Hunish and the Hunish coastline, opposite, composed of picrodolerite, with a distinctly layered (inaccessible) lower part and an unlayered (accessible) upper part.



Figure North Skye 10.18: Detail of the layered character of the Hunish picrodolerite sill on the Hunish coastline, opposite Bodha Hunish.



Figure North Skye 10.19: The unlayered upper part of the Hunish picrodolerite sill on Hunish, opposite Bodha Hunish. Pole *c.* 1m long.



Figure North Skye 10.20: Detail of the unlayered upper part of the Hunish picrodolerite sill on Hunish, opposite Bodha Hunish. Coin *c.* 24mm across.

Continue SE towards <u>Port Lag a' Bhleodhainn</u> past the obvious sea arch and another (unnamed) sea stack.



Figure North Skye 10.21: Sea arch SE of Bodha Hunish.



Figure North Skye 10.22: Sea arch SE of Bodha Hunish.

At <u>Port Lag a' Bhleodhainn</u>, Paleocene dolerite dykes intrude the sill, giving rise to geos (steep-sided clefts). From here, the cliffs above <u>Lùb a' Sgiathain</u> can be viewed from a different perspective.



Figure North Skye 10.23: Coastline NW of Port Lag a' Bhleodhainn, with geos located where younger dykes intrude the sill, and with good plan and section exposures of the Hunish sill.



Figure North Skye 10.24: Coastline NW of Port Lag a' Bhleodhainn, with good plan and section exposures of a sill. View is towards the NW during low tide conditions. Note NW-SE -trending dykes of the Paleocene regional swarm, giving rise to geos.

Return to the top of the path SW of <u>Meall Tuath</u>. Follow the path SW towards <u>Meall Deas</u> and around the cliff-fringed coast, south, with <u>Duntulm Bay</u> and its attendant island, <u>Tulm Island</u>, to the west. Inland is the abandoned village of <u>Erisco</u>. A once fertile area capable of producing crops of potatoes and oats, it suffered the persecution of the 19th Century, when landowners chose the profits of sheep farming over the livelihoods of the people who worked the land and eked out a living.

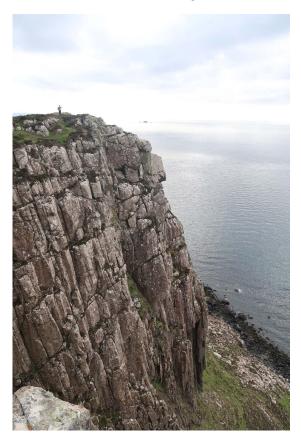


Figure North Skye 10.25: The cliff-fringed cliffs west of Meall Tuath. Iain Allison for scale.



Figure North Skye 10.26: Information board about the abandoned village of Erisco, east of Duntulm Bay.



Figure North Skye 10.27: Tulm Island, viewed towards the SW from Erisco.

On the route south from <u>Erisco</u> towards <u>Duntulm</u>, the headland above <u>Port Duntulm</u> is in view. Sitting atop this outcrop of a layered picrodolerite sill, the same sill forming <u>Hunish</u>, are the remains of <u>Duntulm Castle</u>. This was the ancient seat of the MacDonalds. Parts date back to the 15th Century, but it was abandoned in the 1730s. This accessible exposure of the layered picrodolerite sill is considered in detail in **Excursion North Skye 11**.



Figure North Skye 10.28: The cliff at Port Duntulm, with the remains of Duntulm Castle, and the crags of Creag Orrill and Creagan Iar, beyond. In the distance is the inland escarpment of Trotternish at Creag Sneosdal, composed of Paleocene basaltic lavas of the Beinn Edra Formation.



Figure North Skye 10.29: Detail of the layered Paleocene sill forming the crags on the south side of Port Duntulm. The remains of Duntulm Castle, perched on the headland, date back to the 15th Century.

From <u>Erisco</u>, head SE across <u>Blàr Stamanaig</u> to the <u>Shulista</u> <u>road-end</u> and to the <u>parking place</u>.

End of excursion.