West Skye 4:

Waternish



Waternish, the middle of the three peninsulas of North Skye, is dominated by the stratified Paleocene lavas of the Ramasaig Group. Exposure is largely limited to the cliffs that fringe the peninsula. The geology of Waternish is best appreciated by a traverse along its west side from Trumpan to Waternish Point. From Waternish Point there are superb views NW to the Outer Hebrides archipelago, with stunning sunsets.

Aspects covered: Large-scale architecture of Paleocene basaltic-mugearitic plateau lavas; small-scale internal characteristics of the lavas; lateritised tops of lavas; dykes of the Paleocene regional swarm; fault zones.

Route: <u>Trumpan – Greep – Àrd Beag – (Trumpan) – Dùn</u>
Borrafiach (broch) – <u>Dùn Gearymore (broch) – Unish – Waternish Point (Rubha Bhatairnis)</u> (- return <u>Trumpan</u>).

Distance: 14 kilometres (7km each way).

Time: 5-6 hours.

General comments: An excursion dominated by coastal views, with limited access for detailed examination of exposures. From Portree, take the A87 NW to the road junction at Borve and then branch left on the A850 road through Carbost and Edinbane to Fairy Bridge at <a href="[NG 2807 5123]. Take the minor (B886) road north to Waternish, through Stein and Halistra and finally to Trumpan. Parking is available opposite the ruined church ([NG 2249 6121]) at Trumpan, on the NW side of the Trumpan loop road.

The church at <u>Trumpan</u> has a troubled past, the scene in 1578 of a mass murder of Macleods, by Macdonalds from Uist, who barricaded the church and set the roof on fire.

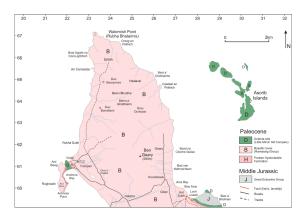


Figure West Skye 4.1: Geological map of the northern end of Waternish.



Figure West Skye 4.2: Annotated Google Earth® image of the northern end of Waternish.

Before commencing the route north to <u>Waternish Point</u>, it is worth investigating (the peninsula of) <u>Àird Mhòr</u>.

Follow the public road for *c*. 350m to Ardmore Bay and head north to the bay between Ard Beag and Greep. Access the coast at Greep, taking care to stay away from the steep, unstable crags.

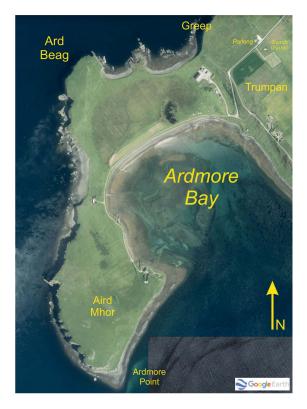


Figure West Skye 4.3: Annotated Google Earth® image of the Àird Mhòr area, Waternish.



Figure West Skye 4.4: Ardmore Bay from Trumpan, with Dunvegan Head on the far side of Loch Dunvegan. View is towards the west.

Locality 1[NG 2222 6126]:

The base of the lava-dominated cliffs at <u>Greep</u> comprises an up to *c*. 6m thick disrupted sequence of dark grey volcaniclastic shales, most likely of lacustrine association. A reddened interval suggests temporary exposure and weathering as the sequence accumulated. Thin, astomosing hydrothermal veins disrupt the sequence.

The base of the volcanic sequence is not seen, and it is possible that the shales belong to the so-called Portree Hyaloclastite Formation, a lithologically diverse sequence formed during early hydro-volcanic -dominated volcanism.

The overlying basaltic lava contains abundant pipe amygdales, indicative of flow across a wet substate (the subjacent shales), giving rise to a (vertically-rising) vapour phase producing the original vesicles. Subsequent burial led to the infilling of the gas cavities by hydrothermal minerals.



Figure West Skye 4.5: Volcanic sequence at Greep, NW of Trumpan, comprising prismatic-jointed basaltic lava(s) overlying volcaniclastic shales. A wide vertical dolerite dyke of the Skye Regional Dyke Swarm cuts the sequence.



Figure West Skye 4.6: A disrupted sequence of volcaniclastic shales with a reddened interval (due to penecontemporaneous weathering) at Greep, NW of Trumpan. Pole *c*. 1m long.



Figure West Skye 4.7: Detail of volcaniclastic shales with mineralised, close-spaced joints, at Greep. Coin *c.* 24mm across



Figure West Skye 4.8: Basaltic lava with abundant, near-vertical, pipe amygdales, predominantly various zeolites, in the coastal sequence at Greep, NW of Trumpan.



Figure West Skye 4.9: Detail of near-vertical pipe amygdales, some branching upwards, predominantly of various zeolites, in basaltic lava at Greep, NW of Trumpan. Coin *c.* 24mm.

Continue west along the coast towards the headland of Àrd Beag, composed of a dolerite sill of the Paleocene Little Minch Sill Complex. The near-vertical joints within the sill indicate its horizontal disposition. The outcrop of the sill continues south along the west coast of the Àird Mhòr peninsula, giving rise to a double arch.



Figure West Skye 4.10: Dolerite sill exposed on the east side of the promontory of Àrd Beag. View is towards the west.

The remainder of this excursion involves a traverse along the track from <u>Trumpan</u>, north to <u>Unish</u>, and onwards to <u>Waternish Point</u>. The track is inland from the west coast of the peninsula and detours of the track to the coast are required to observe the cliff exposures. *En route* are various archaeological and historic sites, worthy of examination.

Return to the parking area and continue NE along the public road for *c*. 600m to where the track north towards Waternish Point starts. After *c*. 2km there is a memorial cairn west of the track, to Roderick Macleod of Unish, killed at the second battle of Unish between the Macleods and the Macdonalds in 1530. Head north for a further *c*. 600m, across the Borrafiach Burn, with the Iron Age broch, Dùn Borrafiach, in view to the east (right). This drystone hollow-walled structure is one of the better examples on Skye. The purpose of these structures is still open to debate, with defence being an obvious possibility. A further *c*. 1.2km north along the track is Dùn Gearymore, also to the east, a less well-preserved broch. After a further *c*. 1km, the track ends at the abandoned settlement of Unish.

However, c. 300m after <u>Dùn Gearymore</u>, head NW towards the <u>west coast of the peninsula</u> at <u>[NG 2331 6550]</u>, with the stack of <u>An Càmastic</u> in view.



Figure West Skye 4.11: Memorial cairn to Roderick Macleod, west of Waternish track.



Figure West Skye 4.12: Plaque on memorial cairn to Roderick Macleod.



Figure West Skye 4.13: Ruins of *Dùn Borrafiach* broch, east of Waternish track.



Figure West Skye 4.14: Ruins of *Dùn Gearymore* broch, east of Waternish track.

Like the Paleocene Ramasaig Formation lava sequences of Durinish to the west and Trotternish to the east, basaltic compositions are dominant, with porphyritic variants. Prismatic joint sets are common and hiatuses in the volcanism are indicated by weathered tops (fossil soils, laterites, boles).

Inland exposures are uncommon and, at best, give rise to discontinuous terraces.



Figure West Skye 4.15: West coast of Waternish, constructed of basaltic lavas, viewed towards the north, towards the sea stack, An Càmastac.



Figure West Skye 4.16: West coast of Waternish, viewed towards the south, towards the sea stack, An Càmastac.



Figure West Skye 4.17: Prismatic-jointed basaltic lava, Biod Sgiath na Corra-gribhich.

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Figure West Skye 4.18: Typical inland exposures on Waternish, give rise to discontinuous terraces.

Two locations worth visiting when you make it to the end of the track are <u>Unish House</u> and the lighthouse at Waternish Point (Rubha Bhatairnis).

Abandoned <u>Unish House</u> is believed to one of the earliest purely domestic habitations on Skye, that is, without defences or battlements. It was last inhabited at the end of the Nineteenth Century. The surrounding buildings were part of the surrounding runrig township, <u>Bail' an Tailleir</u> (Taylor's Town), cleared/abandoned by *c*.1875, when landowners chose sheep over people.



Figure West Skye 4.19: Ruins of Unish House, Bail' an Tailleir, Waternish. Last occupied *c.* 1900.



Figure West Skye 4.20: Waternish Point Lighthouse, a wee bobby dazzler of a lighthouse, powered by solar panels, a 1980 replacement of the original 1924 lighthouse designed by David and Charles Stevenson.

From the lighthouse at <u>Waternish Point</u>, there are superb views to the west to <u>Dunvegan Head</u>, composed of Paleocene lavas similar to those of Waternish, to the east to the northern part of <u>Trotternish</u>, composed of thick dolerite and picrite sills of the Paleocene Little Minch Sill Complex intruded into Middle Jurassic strata, and NW to the Outer Hebrides, formed of Archaean basement gneisses of the Lewisian Gneiss Complex.

Although a clockwise circuit of the peninsula is possible, the going is relatively difficult and possibly of limited value. Return to the track, either by reversing the route, or by heading SE from Waternish Point (Rubha Bhatairnis) to Unish and thence south along the path to Trumpan.

End of excursion.