West Skye 2:

Claigan Coral Beach



Claigan Coral Beach is located on the east side of Loch Dunvegan between (the peninsulas of) Waternish and Duirinish. The beach is protected by the tidal island Lampay, connected at low tide via a tombolo. The inlet between the coral beaches and Lampay, An Dorneil, translates to 'the stony or gravelly place.' In this instance, the debis is dominated by the bleached carbonate (exo-) skeletons of red coralline seaweed – not coral - and referred to as maërl. On a bright day, set against a blue sky, the beach dazzles. At low tide there is the added attraction of viewing the beach from Lampay.

Aspects covered: the Claigan coral beach – the Lampay tombolo – Paleocene plateau lavas – Paleocene sills of the Little Minch Sill Complex – Paleocene dykes of the regional swarm – views of the lava field of Dunvegan head at the northern end of Duirinish.

Route: <u>Claigan</u> – <u>An Dorneil</u> – <u>Lampay</u> – <u>Cnoc Mòr a'</u> <u>Ghrobain</u> (- return <u>Claigan</u>).

Distance: 4 kilometres.

Time: 3 hours.

General comments: An easily accessed and popular tourist attraction with a significant geological content. Parking is available at the end of the public road at <u>Claigan</u>, although in good weather in the Spring, Summer and Autumn months, demand for space is high. <u>Claigan</u> is located 5 miles (8km) north of <u>Dunvegan</u> on the east side of <u>Loch Dunvegan</u>. <u>Dunvegan</u> is 21 miles (34km) west of <u>Portree</u>.

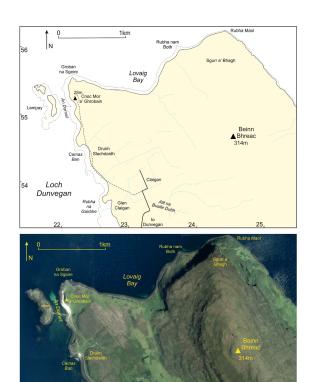




Figure West Skye 2.1: Simple topographic/location map and annotated Google Earth® image of the Coral Sands coast, NW of Dunvegan.



Figure West Skye 2.2: Google Earth[®] image of An Dorneil and Lampay, NW of Dunvegan.

From <u>Claigan</u>, go through the gate and take the path (signposted) NW along the east side of <u>Loch Dunvegan</u>, past <u>Camas Bàn</u> (which has some coral sand), to the beaches opposite the tidal islet of <u>Lampay</u>. The path can be muddy and there is a minor stream with stepping stones to cross. The path cuts through a gap in a stone wall and then rises to where the beach is obvious.



Figure West Skye 2.3: The Coral Sands beach and the tidal island of Lampay viewed from the south.

Locality 1 [NG 2232 5497]:

The dazzlingly white beaches opposite Lampay - Tràigh a' Chorail ('Coral Beach') - are composed entirely of fragments of coralline seaweed (maërl). Maërl, unlike most seaweed, grows a hard outer (exo-) skeleton (thallus) composed of calcium carbonate and tends to grow where there are significant sea currents. There are two types or species of maërl in the Coral Sands, *Phymatolithon calcareum* and *Lithothamnion glaciale*. It grows unattached to the seabed, forming balls that roll around due to tidal currents. The main area where this magenta seaweed is slowly growing is off Lampay. Colour is lost when exposed to the bleaching effect of direct sunlight. The carbonate has the effect of causing the shallow water near the beach to take on a pale blue hue.



Figure West Skye 2.4: Detail of the 'coral sands' – in reality, fragments of carbonate exoskeletons of coralline seaweed. Coin *c*.20mm across.

The tombolo between the coral beach and Lampay is also dominated by fragments of maërl and can be crossed at low tide to give a different view of the beach. Rarely, the unbroken algae colonies are seen. In the past, these sands have been used locally as a crude agricultural lime to improve soil quality.



Figure West Skye 2.5: The Lampay tombolo viewed towards the NW, with Harris, Outer Hebrides, in the distance.



Figure West Skye 2.6: The Lampay tombolo viewed towards the west, with Dunvegan Head at the northern end of Duirinish in the distance.

From the beach, continue north to the top of <u>Cnoc Mòr a'</u> <u>Ghrobain</u>.

Locality 2 [NG 2234 5522]:

From the top of <u>Cnoc Mòr a' Ghrobain</u>, there is the reverse view of the beach. It is also an excellent viewpoint of Macleod's Tables, <u>Healabhal Mhòr</u> (large or north; 469m OD) and <u>Healabhal Bheag</u> (small or south; 488m OD), on Duirinish. These classic plateaux are composed of lavas belonging to the Ramasaig Formation, mainly basalts, with a few hawaiites and mugearites.



Figure West Skye 2.7: The Coral Sands beach viewed towards the south from Cnoc Mòr a' Ghrobain, with Healabhal Mhòr on Duirinish in the distance.

Immediately to the north, at <u>Cnoc Mòr a' Ghrobain</u>, the Paleocene lavas are intruded by a dyke of the NW-SE trending regional swarm. <u>losaigh</u> (Isay), the largest of the nearby islands, is also composed of flat-lying lavas, whereas the two smaller islands to the east, <u>Mingay</u> and <u>Clett</u>, with their distinctive inclines, are outcrops of dolerite sills of the Paleocene Little Minch Sill Complex, well developed throughout northern Skye. In the distance is Harris of the Outer Hebrides, composed of the Archaean basement Lewisian Gneiss Complex.



Figure West Skye 2.8: A dolerite dyke of the NW-SE - trending regional swarm at Groban na Sgeire, viewed towards the north from Cnoc Mòr a' Ghrobain.



Figure West Skye 2.9: The island of Ìosaigh (Isay), composed of plateau lavas, viewed towards the north from Cnoc Mòr a' Ghrobain. Harris of the Outer Hebrides is in the distance.



Figure West Skye 2.10: The islands of Mingay (left) and Clett (right) composed of inclined dolerite sills of the Little Minch Sill Complex, viewed towards the north from Cnoc Mòr a' Ghrobain. In the middle distance is Ardmore Point on the west side of Waternish, composed of plateau lavas. Harris of the Outer Hebrides is in the distance.

Return to the parking area.

End of excursion.