

# Trail 4: Eshaness coast

The cliffs between the lighthouse and the Grind o da Navir show a sequence of lavas, tuff (volcanic ash) and agglomerate that were laid one on top of another to form the volcanic cone.

Kirn o Slettans was a side cone on the volcano, built up from volcanic blocks and bombs. These were lumps of hot rock ripped from the vent walls, and blasted up and out to form layers of agglomerate on top of the lavas.

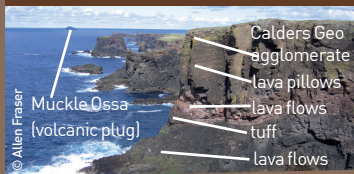
Blocks and bombs, Kirn o Slettans



Seawards to the north, the cone shaped stack of Muckle Ossa is probably the solidified lava feed channel to the main vent of the volcano, now exposed by erosion.

The sea has cut a deep gash at Calders Geo, exposing layers of lava flow, agglomerate and distinctive lava pillows in the cliffs

Muckle Ossa and Calders Geo



At Drid Geo you can count individual lava flows stacked one upon the other. Lava shrinks as it cools often forming columnar joints and cracks in the thicker flows.

Lava flows, Drid Geo



Breigeo is an amphitheatre displaying a spectacularly domed lava flow at its base. In the cliffs a pile of many thin lava flows overlies a weak zone of extremely weathered lava that allows wave action to undercut and collapse the cliff face.

Lava domes, Breigeo



The headland of the Grind o da Navir is formed from a distinct red rock called ignimbrite. It was created from pyroclastic flows - searingly hot clouds of gas, blobs of molten lava and fragments of pumice that swept down the side of the volcano at over 100km/hr!

When the cloud settled as a layer several metres thick, the particles welded together and were squashed into candle-flame shapes or 'fiammé'. If you look closely you can make out the individual drops.

Today water plays a bigger role than fire at the Grind o da Navir. Two bastions of cliff stand above a sea-cut amphitheatre framing a grind (gateway) to the Atlantic below. During violent storms, waves are driven through the grind, tearing huge blocks from the bedrock and floating them inland to form ridges or 'storm beaches'.

Hols o Scraada is a partially collapsed sea cave. Waves roll down a subterranean passage to break on a beach 100 metres inland. The burn here once powered water mills. It runs from the Loch o Houlland, where you will find the remains of a 2000 year old broch (Iron Age stone tower).

Fiammé in ignimbrite, Grind o da Navir



## Directions

(Allow 2 hours for this route)

In front of the lighthouse is a hole leading to a cave beneath. This is the Kirn o Slettans - a blowhole that blasts water high into the air during storms.

*Take Care - this hole is deep and the rocks are slippery.*

Follow the coast via Calders Geo and Breigeo to Grind o da Navir. Take some time to explore (the Grind o da Navir makes a good picnic spot). Return via the same route until you pass Breigeo. Follow the trail marker inland to visit the Hols o Scraada and the Broch of Houlland on your way back to the car park.

## Access



- Most of the ground is easy going and crosses farmland. However, the cliffs are high and steep sided in places. There are no warning signs or barriers.
- Strong winds can make this walk very dangerous so check the weather forecast before setting out.
- The route includes a number of two step and ladder stiles.

## Interpretation

- Information panel

- 1 Kirn o Slettans
- 2 Calders Geo
- 3 Drid Geo
- 4 Breigeo
- 5 Grind o da Navir
- 6 Hols o Scraada
- 7 Broch o Houlland

**“The best section through the flank of a volcano in the British Isles”**

Dr. W. Mykura - leading geologist