

## Strath 10: Spar Cave, Glasnakille



*Spar Cave, located on the cliff-fringed east coast of Strathaird at Glasnakille, is a spectacular carbonate-bejewelled cavern only accessible at low tide. The route down to the coast is easy and the section of coastline that needs to be traversed is short: the main restriction is the tide, with a maximum safe interval on either side of low tide of one hour. These two hours should be sufficient to enjoy the cave and examine the many dykes of the Paleocene regional swarm that intrude the spectacularly cross-bedded Druim an Fhuarain Sandstone Member of the Middle Jurassic Berreraig Sandstone Formation.*

**Aspects covered:** Carbonate encrustations on the vertical walls of geos and within Spar Cave; cross-bedded shallow marine sandstones of the Middle Jurassic Druim an Fhuarain Sandstone Member of the Berreraig Sandstone Formation; Paleocene dolerite dykes of the NW-SE - trending regional swarm.

**Route:** [Glasnakille](#) – [Spar Cave](#) (- return [Glasnakille](#)).

**Distance:** < 1 kilometre.

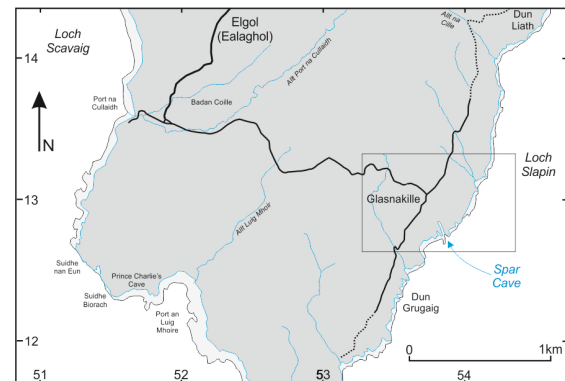
**Time:** Up to 3 hours.

**General comments:** Coastal exposures are involved and, therefore, low tide conditions (preferably Spring) are essential: it is very easy to lose track of time, which could lead to being cut off for the return journey. The track down to the coast is steep and the boulder covered coastline is slippery and strewn with seaweed; navigation of both made easier with a walking pole. The cave is dark, so a good light, preferably a head torch, is essential. If trapped by the tide, a wait of several hours is involved, so take a snack (food and drink) as a precautionary measure. A mobile phone is another advised precautionary piece of kit. A pair of wellington boots with good grip might be useful in order to avoid wet feet when in the cave. The floor at the entrance tends to be quite muddy with pools of water, and care should be taken to avoid slips. Finally, given the tidal constraints, it is prudent not to attempt this excursion on your own.

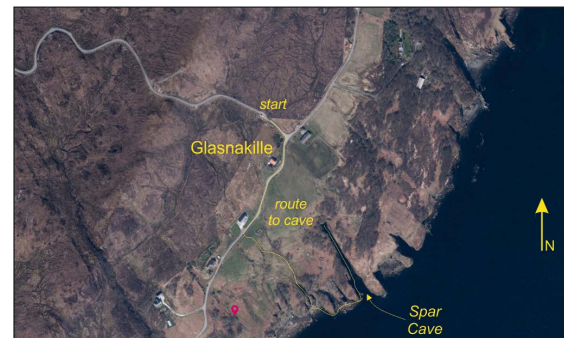
[Elgol](#) is located on the west side of [Strathaird](#), 24km (15 miles) SW of [Broadford](#) on the B8083 road. From the road Excursion Strath 10: Spar Cave, Glasnakille

junction at [Elgol](#) it is a further c. 2km east across the peninsula to the [T road junction](#) at [Glasnakille](#); parking is possible near to (but not blocking) the [cattle grid](#).

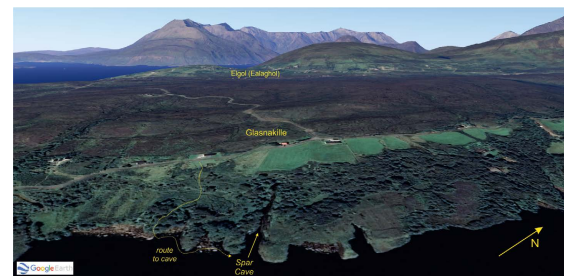
From the parking area, walk to the [T junction](#) and head south (right) past the telephone kiosk to just beyond the [derelict cottage](#) opposite [Spar Cottage](#).



**Figure Strath 10.1:** Location map for Spar Cave, Glasnakille.



**Figure Strath 10.2:** Route map to Spar Cave.



**Figure Strath 10.3:** Oblique Google Earth© image of the east coast of Strathaird, indicating the location of Spar Cave and the route to access the cave. View is towards the west, with the Cuillin Hills in the distance.

Use the [gate](#) to access the ground on the coastal (east) side of the road and follow the obvious [path](#), keeping left where it forks, leading (steeply) downhill to the coast. Upon reaching the coast, head north (left), close to the high-tide line, to the deep [coastal recess](#) (geo) that leads to Spar Cave [[NG 5379 1288](#)].



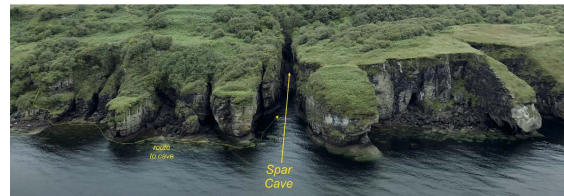
**Figure Strath 10.4:** Fork in path: keep left to access the shore.



**Figure Strath 10.6:** Blocks and boulders of Berreraig Sandstone Formation strata on coastline at the shoreward termination of the path.



**Figure Strath 10.5:** Reverse view of steep section of path, viewed looking uphill.



**Figure Strath 10.7:** Aerial image of the east coast of Strathaird, indicating the location of Spar Cave and the route to access the cave. View towards the west at high tide.

The Gaelic name for the cave is *Sloc an Altramain*, or *The Nursing Cave*. The name is attributed to a 9<sup>th</sup> Century legend in which a princess falls in love with a son of the chief of Colonsay, shipwrecked on Strathaird. Unfortunately, the fathers of the lovers were sworn enemies. When she gives birth to their child, the baby is concealed in the cave to ensure his survival until the feud is settled.

But enough of such myths and legends: to the geology.

Upon reaching the coastline, turn left (north) and head the short distance along the coast to the geo (long, vertical-sided gully), with Spar Cave at its west (landward) end.

The cave is within the carbonate-cemented Middle Jurassic Druim an Fhuarain Sandstone Member of the Great Estuarine Group. The environment of deposition of these strata ranges between a delta and a tidally influenced estuary, involving significant changes in sea-level. During periods of relatively low sea-level, deltaic conditions dominated, with the development of: pro-delta shale-siltstone sequences containing bioturbated sandstones; tidally-influenced delta-front sub-aqueous dune fields of large-scale, planar cross-bedded, medium- to coarse-grained sandstones; and, delta-plain fine-grained sandstones with roots and channel geometries. During transgressive periods with relatively high sea-level, sedimentation occurred in an estuarine environment, with the development of tidal-fill channel

sandstones in the form of large-scale, trough and tabular cross-stratified sandstones, some of which are bioturbated, with common slump and water-escape structures. Channel depths were commonly up to 10m, uncommonly greater. Tabular bioturbated sandstones were most likely deposited in a shelfal environment. Sediment transport direction, on a large scale, varied considerably with time, with both southerly and northerly sources, implying transport parallel to the basin-controlling Camasunary-Skerryvore Fault.

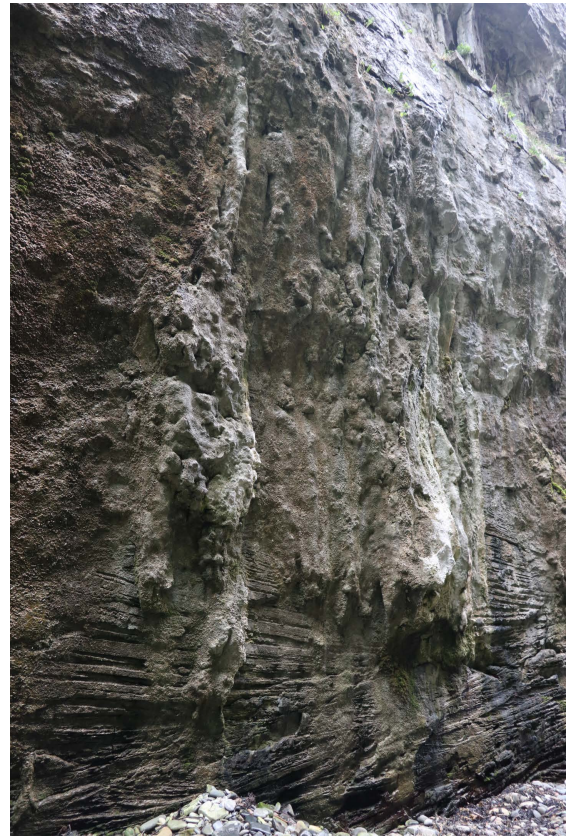


**Figure Strath 10.8:** Coarse, cross-stratified Druim an Fhuarain Sandstone Member strata on the north side of the Spar Cave geo. View towards the north.

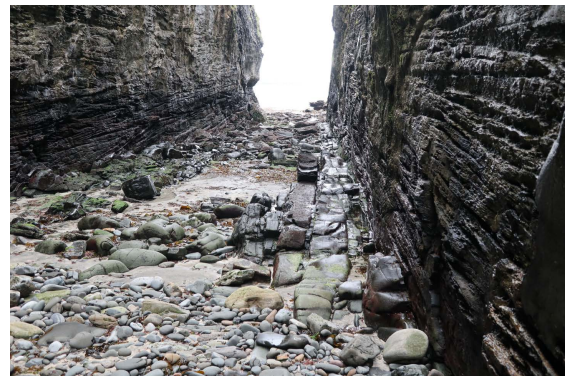


**Figure Strath 10.9:** Detail of coarse, cross-stratified Druim an Fhuarain Sandstone Member strata on the north side of the Spar Cave Geo. View towards the north. Pole c. 1m long.

Intruded into these strata are Paleocene dolerite and basalt dykes of the NW-SE -trending regional swarm, resulting in the distinctly indented coastline, whereby the more easily eroded (block jointed) dykes form the many geos (coastal indents). Spar Cave is located at the back of one such carbonate-encrusted geo (vertical-sided coastal indent).

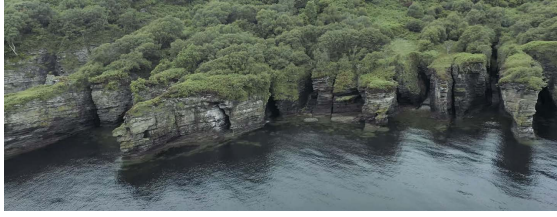


**Figure Strath 10.10:** Carbonate encrustations on the vertical wall of Druim an Fhuarain Sandstone Member strata of the Spar Cave geo.



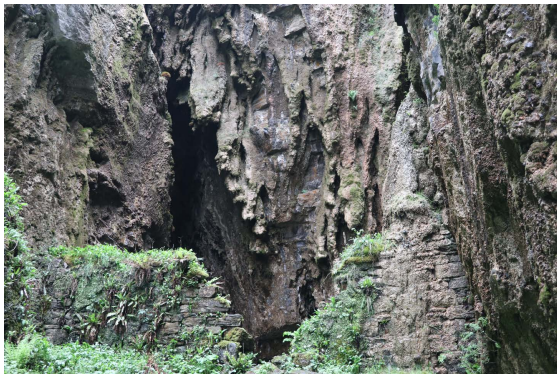
**Figure Strath 10.11:** Paleocene dolerite dykes (adjacent to right-hand/south wall), intruded into Druim an Fhuarain Sandstone Member strata of the Spar Cave geo.

The source of the carbonate encrustations on the vertical sides of the geos and the carbonate flowstone that coats and floors the cave is the abundant carbonate cement within the sandstones: dissolved by groundwater and subsequently deposited on the walls of the geos and in the cave.



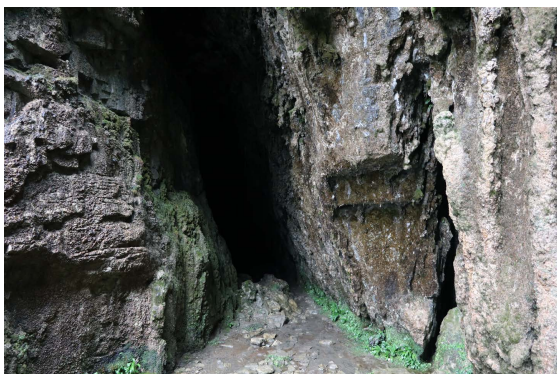
**Figure Strath 10.12:** Glasnakille geos viewed towards the west.

Immediately in front of the cave entrance are remnants of a substantial wall, built so that a previous landowner could charge visitors to the cave when accompanied by a guide, and apparently intact when the cave was visited by Walter Scott in 1814, but reputedly removed by cannon shot at some later date.



**Figure Strath 10.13:** Carbonate encrustations on the vertical wall of Druim an Fhuairin Sandstone Member strata above the entrance to Spar Cave. Note breach in wall.

There are two cave entrances: one on the left (south), which is Spar Cave, and one on the right (north), which is filled with water.



**Figure Strath 10.14:** Entrance to Spar Cave.

The accessible limit of the cave is a deep pool, the one referred to by Walter Scott in his poem *The Lord of the Isles*: (as the) 'mermaid's alabaster grot, who bathes her limbs in sunless well, deep in Strathaird's enchanted cell.'

Prior to Scott's visit, in 1811, Kenneth MacLeay provides a description of the cave, 'lately discovered' with its *Excursion Strath 10: Spar Cave, Glasnakille*

'thousand icicles of pure white spar' subsequently lost due to trophy hunters who followed in his footsteps.

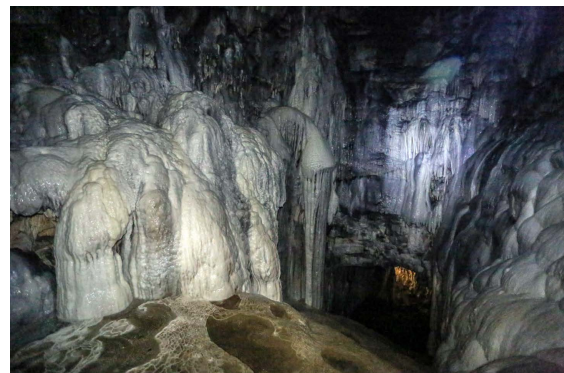
The first serious geological account that mentions Spar Cave is in John Macculloch's *A Description of the Western Islands*, published in 1819. Here, he describes: 'A narrow and obstructed opening leads unexpectedly into the cave, which for a distance of about a hundred feet is dark, wet and dreary. A steep acclivity formed of a white stalagmite then occurs, which being surmounted with some difficulty, the whole interior comes into view, covered with stalactites disposed in all the grotesque forms which these incrustations so commonly assume.' (Volume 1, p. 272).

Sadly, Victorian tourists robbed the cave of its stalactites and stalagmites, leaving what is seen today. It behoves all visitors not to damage or remove any material from the cave. Take photographs and leave nothing behind.

Proceeding into the cave, the floor rises due to the flowstone (sheet-like deposits of carbonate minerals) that have formed as carbonate-rich groundwater flowed down the walls of the cave and across the floor, depositing (over millennia) minerals. In places, the flowstone has a staircase-like form. The limit of the cave is where the flowstone floor descends and there is a large pool of water.



**Figure Strath 10.15:** Interior of Spar Cave.



**Figure Strath 10.16:** Interior of Spar Cave.



**Figure Strath 10.17:** Interior of Spar Cave.



**Figure Strath 10.18:** Interior of Spar Cave.

Return to the public road.

End of excursion.