# Northmaven Geology





In the North Mainland of Shetland you have an incredible and fascinating geological variety within your grasp. Discover some of the oldest rocks in Scotland; take a walk into the heart of an ancient volcano and marvel at the most dramatic storm sculpted coastline that Shetland has to offer!

#### Eshaness- Shetlands volcanic past!

SHETLAND HERITAGE TRAILS

420 million years ago, three ancient continents were colliding with one another. Shetland was part of one of these continents. As they collided, colossal amounts of heat and pressure were produced as the bedrock of the continents crushed together. Molten magma generated during this collision forced its way to the Earth's surface where it erupted to form volcanoes.

#### Find out more with the 'Shetland's Volcano' trail pack - available at Braewick Cafe!

#### 1 Eshaness Coastline

This battered coastline has experienced countless winter storms which have revealed the different stages of the volcanic eruptions. Layer upon layer of volcanic ash and lava flows can be seen exposed in the dramatic cliffs.





#### 2 Stennes Beach

Shetland's "gems" can be found at Stennes. Hiding amongst the pebbles on the beach are agates. They form when hot fluids filled with dissolved minerals circle through Earth's crust. These fluids deposit their minerals in gas bubbles within cooled volcanic rocks.





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SHETLAND HERITAGE TRAILS



#### **3** Walls Boundary Fault

This is Britain's best example of a major shear fault. Rocks on either side of the fault have moved past one another a colossal 100km over the last 370 million years!





#### **5** Uyea Coastline

This is where the oldest rocks in Shetland are found. The rocks have been dated as nearly 3000 million years old! These rocks, known as Lewisian gneiss, are metamorphic. They have been altered due to immense heat and pressure generated within the Earth's interior.

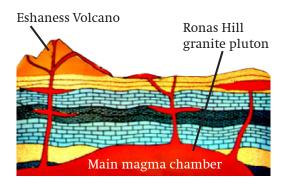
#### 4 Fethaland

Rock 'slices' of different ages and types were torn and thrust up by tectonic forces to lie next to each other here at Fethaland. Quartz veins can be seen running directly through some of the rock outcrops.



#### 6 Ronas Hill

At 450m high this is Shetland's highest summit. From the top, on a clear day the distant north and south islands of Unst and Fair Isle can be spotted. Ronas Hill is a "granite pluton". It was originally a body of magma trapped within Earth's crust much like the one that fed the Eshaness volcano.



This trapped magma cooled very slowly giving the crystals (that form when magma cools) a long time to grow. Over thousands of years, glacial erosion scoured away the Earth's surface exposing the red granite that we see today.

Lool at the rocks at your feet - large pink feldspar crystals will catch your eye!





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### SHETLAND HERITAGE TRAILS

#### 1) Eshaness Coastline: HU 20621 78484 / 60.489517 -1.626579

Take the A970 and the B9078 to Eshaness. Take the turning to the lighthouse, continue to the end of the road and park. Explore the coastline to the north. Two to three hours are needed for a round trip to Grind o da Navir (HU 21390 80378 / 60.506482, -1.612383). Please note this route contains two-step and ladder stiles.

#### 2) Stennes Beach: HU 21417 77112 / 60.477158 -1.612241

Take the A970 and the B9078 to Eshaness. Continue to the end of the road, park and make your way down to the beach. Please note that access to the beach is over a two-step stile.

#### 3) Walls Boundary Fault: HU 37120 80931 / 60.510308 -1.325904

Take the A970 and the B9079 to Ollaberry. Turn right at the post office (just before Runnadale), follow the road around to the church and park. Walk round or through the churchyard and follow the public access route around the coast until you reach the interpretive panel. One to two hours is needed to walk to the site and back. Please note this route contains two-step stiles. It is a steep and slippery scramble down to the beach so caution is necessary. It is not advised in wet weather.

#### 4) Fethaland: HU 37433 94261 / 60.629950 -1.317689

Take the A970 towards North Roe, continue to the end of the road and park so as not to obstruct gateways. Continue on foot along the track to Fethaland. About three hours are needed to walk out to Fethaland and back. Please note this route contains two-step stiles and requires a good level of fitness.

#### 5) Uyea Coastline: HU 32039 92453 / 60.614185 -1.416559

Take the A970 to North Roe and turn off to Sandvoe. Park opposite the cemetery, then walk to the end of the road and along the track. At the end of the track head north up the hill then explore the coastline to the west. About four hours are needed to walk out to view Uyea Isle and back. The route contains two-step stiles. It is a challenging walk and requires a high level of fitness. Attempting to cross to the island at low tide is not advised.

#### 6) Ronas Hill: HU 30555 83435 / 60.533338, -1.445056

Take the A970 to Collafirth. Just west of the Bay of Collafirth (which is south of Housetter) a track leads from the main road up to the radio masts on Collafirth Hill. Turn along the track, drive to the end and park. Walk to the top of Ronas Hill. Two to three hours are needed to climb to the top of the hill and descend. This walk is over uneven and often steep terrain and requires a good level of fitness. Please note the Collafirth track is not maintained and has an uneven surface.

### Coordinates are given as a guide only. You may wish to consult OS Explorer Map 469 the British Geological Survey 1:50 000 Series sheet 129.

