



Breiðafjörður

Nature and History



Local Conditions and Landscape

Breiðafjörður is an extensive and shallow bay on the west coast of Iceland, between the Snæfellsnes peninsula and the West Fjords, approximately 125 km long and 50 km wide. The bay is surrounded by a jagged coastline and mountains. Lowlands are limited and are found almost exclusively along the coastline. A few villages are found around the bay. The largest ones are situated on the south side of the bay. These are, respectively from east to west: Búðardalur, Stykkishólmur, Grundarfjörður, Ólafsvík, Rif and Hellissandur. The most prominent feature of Breiðafjörður is the abundance of islands, islets and skerries, which seem countless. Nevertheless, their number has been estimated to

Photos

Looking over the islands at the mouth of the fjord Hvammsfjörður, with Rifgröingrar closest. The islands in Breiðafjörður seem countless but their number has been estimated to be close to 2,500. The islands form a bottleneck at the mouth of Hvammsfjörður, causing strong tidal currents, which make the area unstable for boating by those unfamiliar with the area.

Basalt columns on Vaðsteinabjarg, Hergilsøy, on the north part of Breiðafjörður. The island is in the periphery of a central volcano, named after Flatøy.



be close to 2,500 – a number that only includes those that are not submerged during spring tide and where some vegetation of terrestrial origin is found. In some parts of the bay, the difference between high and low tide is up to six metres during an average spring tide, which is more than is found anywhere else around Iceland. Because of the tides and extensive shallows, around a quarter of Icelandic littoral areas (shores) are found in Breiðafjörður. In some areas, sea level changes drastically transform the landscape.

When it comes to wildlife, geology and landscape, the nature of the area is especially diverse and rich, but the area is also known for the unique utilization of nature by the inhabitants and the cultural remains associated with it.

Puffins are the most numerous birds in Breiðafjörður during summer. Colonies can hold up to tens of thousands of puffins, but the colonies are rarely found close to inhabited areas.

Front page: Shags and kittiwakes on basalt columns. Almost all Icelandic shags nest in Breiðafjörður as do approximately 90% of cormorants. The kittiwake is among the most common bird species in Iceland.

Back page: The sunset in Breiðafjörður is renowned for its beauty. The Klakkeysjar islands (top right), at the mouth of Hvammsfjörður, are the highest islands in the bay (72 m).



Geology and Landscape Formation

The bedrock of the Breiðafjörður area is 6-12 million years old and belongs to the Tertiary basalt formation. The bedrock was built up by volcanic activity connected to a former drift zone, the Snæfellsnes volcanic zone. About 6 million years ago, the volcanic activity shifted east towards the former Reykjanes-Langjökull volcanic zone. The youngest part of the bedrock in the Breiðafjörður area is located in the southeastern region, near the fjord Hvammsfjörður, closest to the former

volcanic zone. The oldest bedrock is located in the northwestern part of the fjord. The bedrock is mainly composed of layers of basalt lava, dipping southeast towards the former volcanic drift zone. The volcanic activity in a drift zone is associated with eruptive fissures and central volcanoes. Several ancient central volcanoes can be found in the area, such as in Reiphlófsfjöll, Króksfjörður, Flatøy, Hrappsøy, near Hvamur, and at Setberg. The island Hrappsøy is the only place in Iceland where anorthosite, one of the two main rock types on the Moon, can be found.

During the last ice age, which ended around 10,000 years ago, most of Breiðafjörður was covered

with ice. Glacial erosion sculptured most of the landscape we see in Breiðafjörður today.

Geothermal activity occurs in many places in the littoral zone and below sea level in Breiðafjörður. The largest hot spring is located on a small island close to Hergilsøy, and spouts 10 litres per second. Some of the hot springs have a temperature close to the boiling point. The historic hot spring in the old fishing station on Oddbjarnarsker has a temperature of 73°C. However, the hot spring only emerges at low tide.



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