

#### The historical perspective

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Vikings settled in Greenland in 985/986 AD. About 500 years later, the colonies disappeared. When Hans Egede went to Greenland in 1721 to look for the Norse, he found the settlements abandoned. Early research assumed that they were unable to adapt to the changing climate during the Little Ice Age, over-exploited their natural resources and therefore simply starved to death. But present day researchers rather favour a multi-causal interpretation.

Ice core climate data suggest that from the middle of the 13<sup>th</sup> century the Vikings experienced a greater frequency of harsh and cold winters and summers, often in a sequence. But they outlived the cooling climate for another 200 years. This was only possible because they changed their lifestyles. Originally grazing cattle on their farms, they bade farewell to many of their stock during the first exceptionally cold years and ended up living on marine mammals, mostly seals for 80% of their diet. There is no evidence that this source of food was ever in any danger of being depleted.

In fact the Norse also managed their caribou, non-migratory seals and sea-fowl populations in a sustainable manner through a traditional legal system and communal assemblies serving as courts. From the early to the late period, bones of all these animals were found in the settlement waste heaps.

But when the harsh climate began, the outermost farms were gradually abandoned. Large areas of the land became unsuitable for farming and the Vikings began to gather in the larger settlements. With the decline of agricultural productivity, it was the labourers on the small farms that the larger farms began to draw on. This indicates a centralisation of power and resources. The disparities between the richer members of the community and the poor grew.

Also the economy changed. A key motivation for the settlement of Greenland by the Norse was to gain access to walrus ivory and furs, characteristic items of early Viking low-bulk, high value trade in prestige goods. But increasing trade with Russia allowed easier procurement of furs and, following the Crusades, European markets gained access to African ivory which was preferred by the customers. As a consequence trade declined and the Greenland Norse increasingly lacked crucial supplies such as metal, as well as high quality ship- and building timber. After AD 1400 the Norwegian mariners running the Greenland trade lost their influence in the North Atlantic to the Hanse, but although the Hanse ships were larger they were less suitable for the ocean journey to Greenland.

Encounters with the Inuit offered new opportunities but also may have been the reason for conflict. There are incidents of both, trade as well as quarrels. In AD 1379, the Icelandic Annals note that “the Skrælings [probably the Inuit] attacked the Greenlanders, killed 18 men and captured two boys and made them slaves”. The AD 1379 reference could be interpreted as the loss of three or four of the boats used for sealing and hunting voyages, and would suggest that a single raid cost the Norse Greenlanders as many as 5% of their active adult hunters.

The cumulative changes had been a huge challenge to Norse society. Adaptation might have still been possible, but this would have demanded a complete renunciation of their cultural roots. As most challenges affected those in power last, it is likely that the leaders were unwilling to change.

A number of possible, and probably coinciding, reasons for the ultimate demise of the Greenland Norse colonies have been suggested: migration out of Greenland and home to Scandinavia, conflict with the increasing presence of Inuit or European whalers, disease, and climate change. However, the final fate of the Norse Greenlanders is still open to question.

### Structure of the exercises

The material on Norse Greenland consists of five exercises, which could be used in a sequence or separately.

	Subject	Outcome	Duration
A	Where is Greenland?	Understanding different maps, judging the quality of map sources	40 min
B	Interpretation of Artefacts from the Norse settlements	Understand features of Norse live on Greenland	45 min (90-180 min with outdoor activities)
C	Establishment of the settlement	Understand reasons for migration and how social structures were established	2x 20 min
D	Simulation of change in Norse Greenland	Understand changes occurring through the period of settlement	90-135 min
E	Norse Adaptation	Reflecting on adjustments and their side-effects	45 min

If used in a sequence, there is a certain narrative underlying the five exercises.

- Introduction of Exercise A:**  
The activity provides a context for the entire project by setting the scene in relation to Greenland. At the same time it seeks to develop a range of skills relating to map reading and the understanding of cartographic methods.
- Introduction of Exercise B:**  
Vikings settled in Greenland in 956 AD. Their life on Greenland is still an issue of archaeological research. During the expedition to Greenland we will try to discover some facts about living on Greenland during the Viking period. (Don't tell the pupils about the disappearance of the settlements yet!)
- Introduction of Exercise C:**  
Archeologists found some remains of the Norse settlements. These were of help to understand more about the way the Norse lived on Greenland. What can you find out by analysing the artefacts? Now, after you have discovered that life was pretty hard on Greenland, the question arises, why did the Norse settle on Greenland?
- Introduction of Exercise D:**  
Some information on the changing conditions as well as historical events is known to the researchers. Can the simulation help you to find out, how these affected the lives of the Norse over time?

# 1. LEARNING SUSTAINABILITY FROM THE VIKINGS

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- **Introduction of Exercise E:**

You have experienced how changing climate and trade affected the Norse settlements and tried to adjust your farm management and trading strategies. Let's have a look at what the researchers found out about the reactions of the Norse.

- **Conclusion:**

What have we learned about sustainability from the Norse?

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## Literature

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