

The Vikings & Climate Change

What kind of environmental challenges people faced in the past and how did they deal with them?

What can we learn from studying the past?

Vikings

- Scandinavia Denmark, Norway, Sweden
- Vikingr someone who travels by water;
 "pirate", "searobber", raider



Danes invading England. Illuminated illustration from the 12th century Miscellany on the Life of St. Edmund (Pierpont Morgan Library)





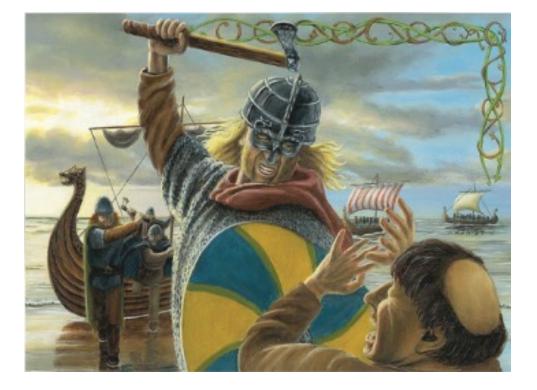
Role of the environment in the success or failure of human societies



Norse/Viking society

- Society of farmers
- Climate/geography of Norway not ideal for agriculture
- Livestock very important cows, sheep, goats, pigs, horses
- Production of iron

What we think Vikings do What Vikings actually do





Iron production

- tools for agriculture, household, construction, and weapons
- required lots of charcoal
- 1 kg of charcoal = 4 kg of wood

Community very important



Image from a reenactment of a Viking village near Durham, England.



Iceland

First impressions

Wrong impressions

Iceland's major volcanoes and tectonic plate boundaries Mid-Atlantic Ridge NORTH AMERICAN EURASIAN PLATE PLATE ∆Krafla ICELAND ∆Askja Loki-Fogrufjoll ∆ ∆Grímsvotn and Laki Reykjavik 🗆 Hekla △Oraefajokull Vatnafjoll

Eyjafjallajokull

(Surtsey, Heimaey)

Vestmannaeyjar

Mid-Atlantic

Ridge

Volcano -

∆ Katla

Atla 0

SOURCE: US Ge

Iceland this year...



Village of Grindavik, 13th Nov. 2023



Volcanic eruption in Reykjanes peninsula, July 2023

Volcanic ash

Volcanic ash

In an attempt to recreate this



The Vikings created this

Adaptation in Iceland

The Norse changed lifestyles Started recycling wood Changed livestock



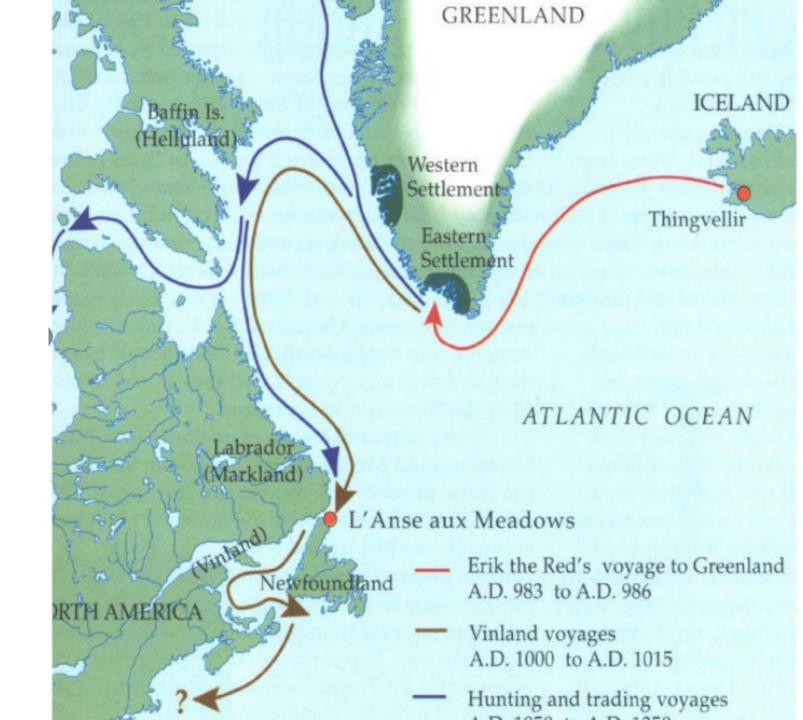
Why? Vikings disappeared from Greenland c.1400



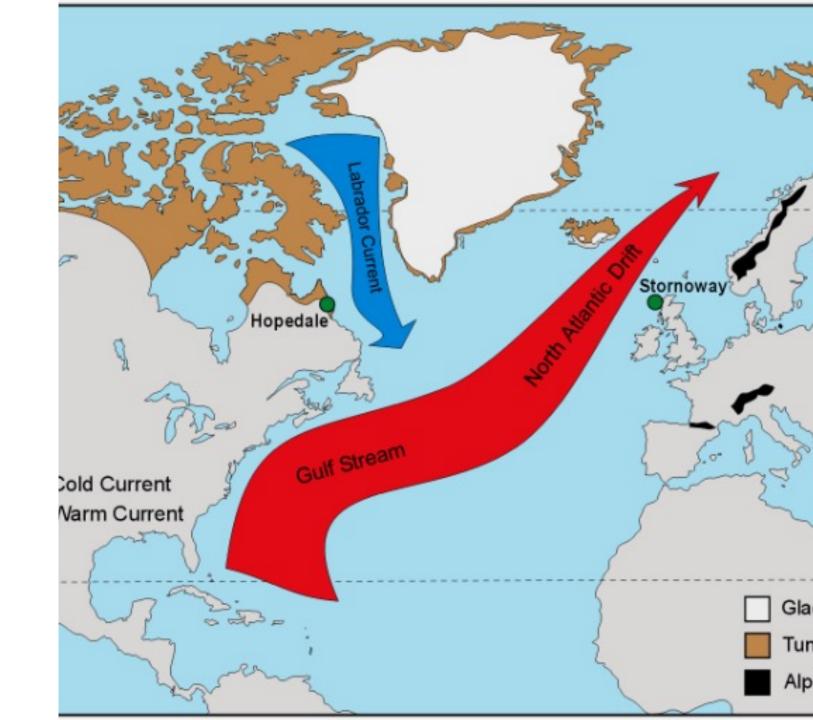


Greenland, not so green

Viking settlements



Gulf stream



•Cold •Windy •Foggy All of the above at the same time (variable)

Why Greenland?

Walrus

Prized for their ivory tusks



Conflict with Vikings

Climate change 800-1300 – mild climate 1300-1870 – Little Ice Age

Effects of Little Ice Age

Globalization & Climate Change in the Age of the Vikings

- Access to food & supplies in Greenland
- Sub-Saharan African trade
- Changes to the market for Walrus ivory





Inuit better prepared

Vikings in Greenland

Relations between Vikings and Inuit

Changes in economy and weather conditions