

## Abstract

This thesis aims to examine the extent to which, and the circumstances whereby people put unsustainable demands on island environments. Firstly, hypothesis-led research focussed on the islands of Suðuroy and Sandoy in the Faroe Islands and the extent to which people have impacted the Faroese environment or not. Secondly, comparative-led interpretations focussed on the importance of the Faroes within the wider Norse North Atlantic (Iceland and Greenland) and aimed to examine the circumstances whereby people put unsustainable demands on island environments. A landscape-scaled, historical ecology approach incorporating original data from landscape mapping, stratigraphic profile analyses, archaeological survey and semi-structured interviews was developed enabling environmental and anthropogenic data to be assessed at a similar comparative scale. Maps were produced of soil degradation and geomorphic features in the Hov catchment and north Sandoy, 226 archaeological structures on two walk-over archaeological surveys were recorded and mapped, in-depth interviews were made with four Sandoy residents, 86 stratigraphic sections were recorded and a chronological framework was provided by 54 radiocarbon dates. The following interpretations were made from the data;

- Two significant environmental thresholds have influenced development of the mid-late Holocene Faroe Islands landscape. The most significant of these occurred prior to human settlement between c.2900 - 2300 cal yrs BP as a result of deteriorating climate in the North Atlantic. The second is less distinct and occurs as two phases, c.60 - 400 AD and c.400 - 650 AD. Human impacts through the introduction of livestock may have caused environmental changes at these times but there is currently no firm evidence of human occupation in the Faroes prior to the sixth century.
- Human impact in the Faroes has been overshadowed by earlier climatically induced impacts. In the wider landscape out with settlement sites, home fields and the communication network, human impact is limited to localised degradation caused by peat cutting and some grazing impact in the highlands.
- Human impact in the Faroes is in part limited because dynamic elements of the landscape were already established prior to colonisation, because the landscape was open and deforested at the time of settlement and because erosion was limited by the diversification of subsistence strategies, particularly the regulated exploitation of pilot whales, seabirds and fish.

In Iceland, analyses of 98 sediment stratigraphies incorporating 1127 tephras and 769 calendar dates across 10 landholdings were compared with the Faroes data. It is concluded that Iceland may have suffered more severe environmental degradation because its biota and soils were sensitive to human impact and because the Norse subsistence strategy focussed principally on pastoral agriculture. The Greenland Norse, however, shared many similarities with the Faroese Norse in terms of the pre-colonisation open landscape, settlement and population size, and communal exploitation of wild food resources.