

THE LOST WESTERN SETTLEMENT OF GREENLAND, 1342

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THE LOST WESTERN SETTLEMENT OF GREENLAND, 1342

A Thesis

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Abstract
of
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The Western Norse Settlement in Greenland disappeared suddenly, probably in 1342. Research in the area includes medieval sources, archeological studies of the ruins, climatic data from the Greenlandic icecap, oral stories from the Inuit in Greenland and Canada, and possible sightings of ancestors of the Norse in the Canadian Arctic. Feeling threatened both physically by the Thule (ancestors of the Inuit) and a cooling climate, and economically by the Norwegian crown, the Roman Catholic Church, and the Eastern Settlement in Greenland, the Western Settlement voluntarily left en masse for the new world, probably in 1342 based on sailing dates.

_____, Committee Chair
Candace Gregory-Abbott

Date

PREFACE

I was volunteering on a trip from Hudson Bay to Baffin Island with *Students on Ice* in 2007, when I heard the zodiac driver say, “there is a Viking trading site in the South Savage Islands.” That made me curious, as trading sites take time and trust to develop. I thought to myself, the *Icelandic Sagas* said that the Vikings only visited the New World until about 1030. Did they travel to America after that? It was a cold and foggy day, and we were looking for polar bears, which we found. These were more interesting to students on the trip than a medieval site, so I let it go at the time.

At about the same time, I read Jared Diamond’s book *Collapse: How Societies Choose to Fail or Succeed*. He had many interesting theories, but I found myself questioning his statements about Greenland. Having lived among Norwegians for two years of my life, I know that they handle cold better than most people, and also that they both catch and eat a lot of fish. His statement on page 261 that “they had a prohibition against eating fish” sounded, well, fishy to me.

Between hearing about a Viking trading site and reading Diamond’s book, I became curious about the Greenland settlements. My first project in returning to school at California State University, Sacramento, was on the Norse Settlers of Greenland. While there were two settlements, I found myself drawn to the Western Settlement, because it suddenly disappeared in about 1342. Over the past four years, I worked on different elements of the Western Settlement, figuring out that pirates did affect the Eastern Settlement, but were fully employed with the Hundred Years War when the Western Settlement disappeared. I finally decided to study it for my thesis.

There was only one problem. Research on this subject has never been collected in one place, so I have traveled to Norway, Iceland, and Greenland following the clues of what happened to the settlement. The University of Greenland in Nuuk was a gold mine of information. Much of the research has never been translated from Norwegian and Danish, which I read well. Also researchers have focused on specific areas of study, without looking at the entire body of literature on the subject. The prevailing theory was that cooling temperatures and encroaching Thule affected the settlement, which departed suddenly, but there was no way of really solving what happened to the Western Settlement. What I found about the end of the settlement has both surprised and excited me. There was a logical end to the settlement from both physical and economic factors, which I plan to convey in this thesis.

DEDICATION

This thesis is dedicated to two people, one very much alive, and another who is unfortunately only alive in his wonderful spirit.

First I dedicate this work to Amy Terrell, geologist for the State of California, who allowed this farm girl to wander a chemical spill site, learn glaciology, and figure out how perchlorate was trapped in lenses of clay soil. This solved a cleanup issue that baffled hydrologists for numerous years. When I was ready to give up on this project last winter, she reminded me of my passion for finding what happened to the Greenland settlements, and told me to finish my thesis. So I put away my unfounded thesis that the pirates did it, and found the research I needed in Nuuk, Greenland, this past August. She was with me in spirit when I travelled by boat to the Sandnes farm on August 20, 2011. I thought to myself, what would Amy say about this site? I have learned to consider the topology I see, to figure out what happened at an earlier time.

Secondly, I dedicate my entire graduate program to the memory of Roy “Fritz” Koerner, who I met in Antarctica in 2002. He encouraged me to return to school in my late 50s, and start a new career giving history lectures on cruise ships. I went on three trips with him with the *Students on Ice* program based in Ottawa, Canada, and appreciated his open encouragement of my first lectures on “Erik the Red” and “Roald Amundsen and the Northwest Passage” in 2005 and 2007. His irreverent humor and foul mouth were part of his charm as he mentored the bright teenagers traveling with *Students on Ice*. He died too soon, disappearing suddenly from a fast-moving cancer in 2008. His spirit lingers on in the students he mentored (myself included), and in the work he was doing on climate change on his beloved Devon Icecap. I still miss him.

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I owe a deep debt of thanks to my professors at California State University, to librarians and professionals in California and Europe, to my grandparents and parents who gave me wonderful role models, and to my support team of friends and family.

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Secondly, I appreciate the professionals who helped me find information on medieval Scandinavia and the Western Settlement. At California State University, Sacramento, Ben Amada helped me with medieval sources, while Jack Smith helped me extensively with works in Norwegian, Swedish, and Danish through Interlibrary Loan. I thank librarians at the National Archives near London, Bristol City Library, University of Bristol, University of Oslo, University of Bergen, University of Iceland in Reykjavik, Snorre Sturlason Center in Reykholt, Iceland, and University of Greenland at Nuuk. In Bergen, Professor Geir Atle Ersland gave freely of his time. In Nuuk, I give special thanks to Sissel Gram at Groenlandica Library, and Lars Heilmann and Johanne Grønvold of Ameralik Tours for the boat trip to the ruins.

Next, I am grateful to my grandparents and parents. Grandma Francis tutored me in German, and was the first world traveller in my life (she was in Germany when the Berlin Wall went up). Grandpa Pribble taught me the analytical skills of checkers and pinochle at an early age. Grandma Katie went back to school at age 59 to be a nurse, and married Grandpa when she was 69, moving from Michigan to California. My dad Bill Francis taught me to focus on details and see projects through. My mom Helen Pribble Francis went back to school to be a teacher after raising four kids, and is still my biggest cheerleader. AFS dad Kåre Strande taught me the balance of dancing, while AFS mom Annemor helped me learn Norwegian as an exchange student. (I still benefit from having had Thor Hexeberg as my Norwegian teacher at Nes Gymnas).

Finally, I acknowledge my friends and family who keep me on track on a daily basis. I have special gratitude to Nancy Ottum, who solves my computer problems, to Jennifer Silva Souza, who is one semester ahead of me and now teaching English in the rainforest of Brazil, and to my best friend Cynthia Paulson Hayashi, who typed my first masters' thesis. I also thank my two Great Pyrenees four legged friends, who insist on walks when I am exhausted. Thumper walks me, and I walk Tomba.

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Chapter 1

INTRODUCTION

In the early 1340s, something was amiss in the Western Norse Settlement in Greenland. They usually paid their taxes and church tithes with natural goods as they lacked money. While sometimes late to be sure, they usually managed to send walrus tusks and tough walrus skin rope, polar bear skins and other furs, and the valuable white or grey gyrfalcons favored by kings, to pay their bills in Norway. These shipments were rare, but lucrative enough to risk sailing through ice-filled channels to Greenland, and back across the stormy North Atlantic to Bergen. The Western Settlement had not paid its taxes since 1327; this fostered rumors that they had abandoned Christianity for a heathen lifestyle of hunting and fishing. In the early 1340s, church emissary Ivar Baardsson came from Norway to investigate, and to collect the funds due the church.

When he got to Sandnes, the largest farm of the settlement, he found neither heathen nor Christian, and loose cows, sheep, goats, and horses wandering around. Although later accused of only looking at one farm, he saw four smaller farms on the left side of the fjord, and two very large farms on the right side as he arrived. Since these farms lacked smoke coming from their chimneys or signs of activity, Baardsson concluded they were deserted. His crew knew the cattle would not survive a winter in the open, so they slaughtered as many of the animals as they could carry, and returned to the Eastern Settlement totally mystified. Baardsson blamed the Thule, ancestors of the Inuit, for destroying the settlement, but there was no sign of bloodshed or battle.

Only one clue surfaced in the *Icelandic Annals*, and then burned up in a fire at the Skálholt bishopric in 1630. As bishop of Skálholt from 1630 to 1638, Gisle Oddsson reconstructed in 1637 the most important clue of what happened to the Norse from memory. He had poured over the books in the library while his father was the previous bishop, and decided that the Greenland material was too valuable to lose, that in 1342 the inhabitants of Greenland left the true faith and went to America.

Historians had trouble believing his memory about the burned record. In the late 1300s, the European world lost sailing directions to the settlements when pirates sacked Bergen, killing the sailors who knew the route. Denmark and Norway later fought over who was to blame for the demise of the Western Settlement in the 1340s, and the Eastern Settlement in the late 1400s. Many theories surfaced, first blaming political authorities for not sending ships to Greenland. Others suspected the natives of hurting settlers, or pirates of kidnapping settlers in the 1400s. The Norse were rigid, not adapting to Arctic conditions, some said, while others thought they starved to death.

Scientists later joined with historians to identify climate cooling for making it hard on the small Norse cows in the winter, and bringing the Thule down the coast of Greenland hunting the ring-necked seals. The Thule outnumbered the Norse, who lost several hunting grounds and their domestic animals to Thule hunters. Plus the church wanted churches built by the wealthiest farmers, Norwegian kings raised taxes and restricted trade, and the Eastern Settlement used resources for large church buildings. One day the settlers had enough. Feeling threatened physically and economically, the Western Settlement voluntarily left en masse for the new world, probably in 1342.

Greenland has remained on the outskirts of world civilization and research interest. No one seemed to collect all of the information available to determine what caused the sudden collapse of the Western Settlement. While it was easy to disagree with some of Jared Diamond's conclusions in *Collapse: How Societies Choose to Fail or Succeed*, he brought much needed attention to the Greenland settlers, not just its melting icecap. The Eastern Settlement, with visible ruins, better accessibility, and more integration with Icelandic society, left a better record. The Western Settlement has remained more of a historical mystery, especially since it did not say its goodbyes.

While historians disagreed on theories about what happened to the Western Settlement, they showed considerable convergence of ideas. Information about the Western Settlement came from many sources, including medieval runic symbols, *Icelandic Sagas* and *Icelandic Annals*, general history of Scandinavia, specific studies of the Western Settlement, archeological diggings, and climate data. The Western Settlement had many strong points, and attracted a specific type of settler who wanted a life of hunting and fishing away from civilization. These settlers still clung to the Viking mentality of sharing resources, and objected to increasing greed from outside authorities, including the Eastern Settlement. Concurrently, climate cooling brought the Thule into their hunting grounds, and precipitated the final sudden departure, probably in 1342 from sailing records. Numerous sightings in the Canadian Arctic pointed to their survival as hunters beside the ice-dependent Inuit. The first step in solving the mystery consisted of looking at available native stories and professional studies to see if there were patterns giving clues as to what might have happened.

Chapter 2

OVERVIEW OF HISTORIOGRAPHY

Due to lack of literacy in the Norse Western Settlement in Greenland and few notations in medieval records, historians studying the settlement turned to oral stories from the Inuit in Greenland and Canada, archeological studies of the sites, and climatic data from the Greenlandic icecap. Theories about what happened to the Western Settlement showed more convergence of ideas than one might expect in reading individual articles. Reviewing the work of thirty-five writers gave the following theories, with authors naming several problem areas even if they rarely agreed with each other:

1. Fifteen sources: Climate cooling.
2. Fourteen sources: Norse emigration to America.
3. Eleven sources: Competition with the Thule, but not extermination of the Norse by the Thule.
4. Ten sources: Tension with the crown and church.
5. Nine sources: Norse departure in a hurry, and en masse.

Other theories included ecological problems such as erosion or pests (six sources); a shrinking or weakened population (six sources); extermination by the Thule (five sources); assimilation with the Thule (three sources); lack of trade (three sources); ethnocentrism (two sources); and starvation (one source). Most scholars believed that several factors led to the Norse departure, with agreement since a large excavation in 1976-77 on climate cooling, Thule encroachment, and departure of the group en masse.

The largest agreement among scholars was that a cooling climate caused problems for the Norse.¹ This theory came from climate change data starting in 1950, when Jørgen Meldgaard wrote the first of several articles on the Western Settlement. From his studies, Meldgaard documented the Arctic conditions, small insecure farms, and greater vulnerability to the movements of the Thule that faced the Western Settlement.² Disagreeing with Fridtjof Nansen's earlier theory of cultural assimilation, he stated there was little cross-cultural learning between the Norse and the Thule; the two groups had little chance of successful coexistence competing for hunting grounds.³

¹ Supporting this area were CBS News, June 7, 2011, "How Greenland's cold beat the Vikings." <http://www.cbsnews.com/stories/2011/05/31/scitech/main20067616.html> (accessed 19 August 2011, printed copy, University Library, Nuuk, Greenland); Helene Duprat, "Hvorfor forsvandt Grønlands tidligere bosættere? [Why did Greenland's earlier settlers disappear?]" <http://videnskab.dk/miljo-naturvidenskab/hvorfor-forsvandt-gronlands-tidligere-bosaettere>, 1 June 2011 (accessed 19 August 2011, printed copy, University Library, Nuuk, Greenland); James Robert Enterline, *Viking America: the Norse Crossings and Their Legacy* (Garden City, NY: Doubleday, 1972); Frode Fyllingsnes, *Undergangen til dei norrøne bygdene på Grønland i senmellomalderen [Downfall of the Norse settlements in Greenland in the late middle ages]* (Oslo: Middelalder Forum, 1990); Helge Ingstad, *Westward to Vinland: The Discovery of Pre-Columbian Norse House-sites in North America*, translated from the Norwegian by Erik J. Friis (London: Jonathan Cape, 1969, Norwegian printing 1965); Gwyn Jones, *The Norse Atlantic Saga: Being the Norse Voyages of Discovery and Settlement to Iceland, Greenland, America* (London: Oxford University Press, 1964); Richard Lewis, "Climate helped drive Vikings from Greenland," Brown University, May 30, 2011, <http://news.brown.edu/pressreleases/2011/05/vikings> (accessed 19 August 2011, printed copy, University Library, Nuuk, Greenland); Mads Lindegaard, *Grønlands Historie [Greenland's History]* (Gullander, Skjern, Denmark: Nyt Nordisk Forlag Arnold Busck, 1991); Thomas Howatt McGovern, *The Paleoecology of Norse Greenland: Adaptation and Extinction in a Tightly Bounded Ecosystem*, Dissertation (Ann Arbor, MI: University Microfilms International, 1981); Jørgen Meldgaard, "Landmandsliv i Grønlands Nordbotid [Peasant life in Greenland's Norse Period]," *Handle (Trade)*, 19 January, 1950; Farley Mowat, *Westviking: The Ancient Norse in Greenland and North America* (Boston: Little, Brown, 1965); Frederick J. Pohl, *The Viking Explorers* (New York: Thomas Y. Crowell, 1966); Kirsten A. Seaver, *The Frozen Echo: Greenland and the Exploration of North America ca A.D. 1000-1500* (Stanford, CA: Stanford University Press, 1996); Kathy A. Svitil, "Archeology Watch: 'The Greenland Viking Mystery,'" *Discovery*, 28 July 1997, *The Museum of Modern Art/Film Stills Archive*; Erik Wahlgren, *The Vikings and America* (London: Thames and Hudson Ltd., 1986).

² Jørgen Meldgaard, *Nordboerne i Grønland, en vikingebygds historie [The Norse in Greenland, a Viking Settlement's History]* (København: Munksgaards Forlag, 1965), 87, 93-94, 98.

³ Jørgen Meldegaard, "Om de gamle Nordboer og deres skæbne, betragtninger over Helge Ingstads bog 'Landet under Polarsternen.' [About the old Norse and their fate taken from Helge Ingstads book *Land under the Polar Star*]," *Tidsskriftet Grønland [Journal on Greenland]*, March 1961: 98-100. Nansen's theory comes later in this section.

This theory has had scientific verification in lake core measurements taken at Kangerlussuaq near the Western Settlement by Brown University (published in 2011). Starting around 1100, temperatures dropped over an eighty year period up to four degrees Celsius or seven degrees Fahrenheit during the summers. This caused shorter growing seasons, less livestock food, more sea ice cutting shipping, and longer winters.⁴

Secondly, a large number of authors believed that the Norse emigrated to America.⁵ This theory appeared in the Icelandic Annals, rebuilt by Gisle Oddsson in 1637, that the Norse abandoned the Christian faith and emigrated to America in 1342.⁶ Modern support came from the late 1800s from Inuit stories and the sightings of European-looking natives in the Canadian Arctic. In 1875, Henrik Rink published stories from the Labrador natives about a very strong people called Tunneks or Tunnits who lifted huge blocks of stone, and built houses on the islands of Labrador. Missionaries collecting the original stories heard free mixing of the names Tunnit and

⁴ Lewis, 1.

⁵ Supporting this area were Franz Boas, *The Central Eskimo* (Lincoln: University of Nebraska Press, 1964; original in Sixth Annual Report of the Bureau of Ethnology, Smithsonian Institution, Washington, 1888), 226-28; Enterline; G. M. Gathorne-Hardy, "A Recent Journey to Northern Labrador," *The Geographical Journal* 56, 3 (March 1922): 153-169; A. W. Greeley, "The Origin of Stefansson's Blond Eskimo," *National Geographic Society* 13 (Dec. 1912): 1225-1238; Vera Henriksen, *Mot en verdens ytterste grense [Toward a world's furthest border]* (Värnamo, Sweden: Aschehoug, 1988); Hjalmar R. Holand, *Explorations in America before Columbus* (New York: Twayne Publishers, 1956); William Hovgaard, *The Voyages of the Norsemen to America* (New York: Kraus Reprint Co., 1971, original printing 1914; *Grønlands Historiske Mindesmærker [Greenland's Historical Monuments, third volume]* (København: Det kongelige nordiske oldskrift-selskab, 1845, reprint København: Rosenkilde og Bagger, 1976); Poul Nørlund, *Viking Settlers in Greenland and their descendants during Five Hundred Years* (New York: Kraus Reprint Co., 1971, reprint, original Copenhagen: G. E. Gads Forlag, 1936); Frederick J. Pohl, *The Viking Settlements of North America* (New York: Clarkson N. Potter, 1972); Edward Reman, *The Norse Discoveries and Explorations in America* (Berkeley: University of California Press, 1949); Henrik Rink, *Tales and Traditions of the Eskimo*, translated from the Danish by the author (Montreal: McGill-Queen's University Press, 1974, original Edinburgh: William Blackwood, 1875); Seaver, *The Frozen Echo*; Vilhjálmur Stefánsson, *My Life with the Eskimo* (New York: Macmillan Company, 1919).

⁶ *Grønlands Historiske Mindesmærker*, 460-62. Original text burned, word America obviously added at later unknown date, per Henriksen, pg. 138.

Grønlaender [Greenlander].⁷ Gathering Inuit stories on the Tornits for the Smithsonian Institution in 1888, Franz Boas described their distinctive deer hunting practices using cairns (piles of stones) connected by ropes. The Tornits left in fear for their lives after stealing kayaks from the Inuit, who retaliated while the larger Tornits were sleeping.⁸

Sightings of European-looking natives in the Canadian Arctic lent credibility to the theory that the Norse left for America. Vilhjálmur Stefánsson described “Blond Eskimos” with blue eyes, light-brown beards, rusty-red hair, other European features, and no prior contacts by the Inuits with Europeans, on Victoria Island in the central Canadian Arctic.⁹ A. W. Greeley mapped out the numerous sightings from various explorers of hybridized Inuits with European features across the Canadian Arctic.¹⁰ From the study of genetics, William Hovgaard believed that European women and men both went to the Arctic to contribute the recessive traits of light eyes and reddish hair.¹¹

The third area of agreement was that the Norse settlers faced increased competition with the Thule for vital hunting grounds, leading to inevitable friction.¹² The largest problem for the Western Settlement as the climate cooled was the migration

⁷ Rink, 469-70. Spelling varies between Tunnit, Tornit, Tunit and Tunnek.

⁸ Boas, 226-28.

⁹ Stefánsson, 192, 194-96. Eskimo is a derogatory term in Greenland and Canada; the term Inuit will be used in this paper, except as used by the author in titles or quotes.

¹⁰ Greeley, 1225. Explorers looking for the Northwest Passage in the early 1800s noted very tall individuals with light-colored eyes and long beards.

¹¹ Hovgaard, 46-48, 50.

¹² Supporting this category were Jared Diamond, *Collapse: How Societies Choose to Fail or Succeed* (New York: Viking, 2005); Erik Erngaard, *Grønland i tusinde år [Greenland in a thousand years]*, 2nd ed. (Viborg, Denmark: Sesam Forlaget, 1972, 1982; Finn Gad, *Grønlands Historie I: Indtil 1700 [Greenland's History, part I, to 1700]* (København: Nyt Nordisk Forlag Arnold Busck, 1967); Holand; Lindegaard; McGovern; Jørgen Meldgaard, “Fra Brattalid til Vinland, part II, Hvor lå Markland og Vinland? [From Brattalid to Vinland, part II, where lay Markland and Vinland],” *Naturens Verden (Nature's World)*, December 1961, 370-385; Eric Oxenstierna, *The Norsemen*, translated from German and edited by Catherine Hutter (Greenwich, Conn.: New York Graphic Society Publishers, 1965, German printing 1959); Pohl, *The Viking Settlements of North America*; Seaver, *The Frozen Echo*; Wahlgren.

of the Thule down the Greenland coast, as they soon outnumbered the Norse. This made the walrus hunting grounds at Disko Bay too dangerous for the Norse, costing them their export trade to Europe according to Eric Oxenstierna.¹³ Finn Gad noted that the sharing of hunting areas at Disko Bay and on the coast proved impossible for the two cultures, leading to confrontations. The Thule had no concept of private property, butchering the freely grazing Norse domestic animals and heightening conflict.¹⁴

The most surprising area of agreement was in a growing and general tension between the Norse settlers and the crown and church authorities.¹⁵ This theory became more dominant in the 1980s and 1990s. Thomas Howatt McGovern saw a social structure of the rich dominating small farmers and exhausting their small margin needed for survival. This included an extensive church building program in the Eastern Settlement taking away from communal pursuits.¹⁶ Documenting an escalating conflict with the Roman Catholic Church in Iceland and Greenland, Christian Keller noted that the church tried to seize both churches and surrounding lands.¹⁷ Kirsten Seaver concluded that the Norse settlers voluntarily severed ties with the Norwegian crown and Catholic Church in leaving the Western Settlement.¹⁸

¹³ Oxenstierna, 251.

¹⁴ Finn Gad, *Grønland [Greenland]* (Aarhus, Denmark: Politikens Forlag, 1984), 69-70.

¹⁵ Supporting this category were Enterline; Holand; Christian Keller, *The Eastern Settlement Reconsidered: Some Analyses of Norse Medieval Greenland*, Dissertation (Oslo: 1989); Mads Lindegaard, *Grønlands Historie [Greenland's History]* (Gullander, Skjern, Denmark: Nyt Nordisk Forlag Arnold Busck, 1991); McGovern; Meldegaard, *Nordboerne i Grønland*; Tryggvi J. Oleson, *Early Voyages and Northern Approaches 1000-1632* (Toronto: McClelland and Stewart Limited, 1963); Pohl, *The Viking Explorers*; Kirsten A. Seaver, *The Last Vikings: The Epic Story of the Great Norse Voyagers* (London: I.B. Tauris, 2010); Wahlgren.

¹⁶ McGovern, 259-263.

¹⁷ Keller, *Eastern Settlement Reconsidered*, 5, 34.

¹⁸ Seaver, *The Frozen Echo*, 137-138.

The fifth and final area of agreement was that the Norse left their homes in a hurry and as a group.¹⁹ This theory came from artifacts found in archeological diggings starting in the 1930s. Poul Nørlund detailed many implements and utensils lying around, with the largest Sandnes farm showing a rapid abandonment.²⁰ According to Jørgen Meldgaard, the Norse left suddenly despite having sufficient burning material and food stuff at the end.²¹ Thomas Howatt McGovern saw a long-term decline in the settlement, with accumulated minor changes leading to a swift and catastrophic end.²²

The historiography of the Western Settlement pointed to a sudden breaking point from a cooling climate and competition with the Thule coming down the coast. The Thule outnumbered the Norse, who lost their ability to harvest luxury goods from the hunting grounds at Disko Bay, which they used to pay their taxes and tithes. As the Thule moved down the coast, they blocked the exit to the Western Settlement and then came into the settlement to hunt caribou. Simultaneously, the Norwegian crown and church demanded higher tithes, taxes, and ownership of church property built by the largest farmers in the settlement. The best hypothesis is that the Norse decided that their best chance of survival was to leave, with the year 1342 best matching available sailing records. They were often in Labrador getting lumber and crude iron. After several forced moves, they probably learned the native lifestyle and survived for a time in the Canadian Arctic, mixing with the Inuit.

¹⁹ Supporting this category were Diamond; Enterline; Gad, *Grønlands Historie*; Henriksen; McGovern; Meldegaard, *Nordboerne i Grønland*; Nørlund, *Viking Settlers in Greenland*; Oxenstierna; Pohl, *The Viking Settlements of North America*.

²⁰ Nørlund, *Viking Settlers in Greenland*, 137-39.

²¹ Meldgaard, *Nordboerne i Grønland*, 87, 93-94, 98.

²² McGovern, 259-263.

Historical researchers looking at the Western Settlement have faced several stumbling blocks, including lack of primary sources, lack of accessibility to the ruins, and a political conflict that divided scholarship into competing national interests. First of all, the Western Settlement in Greenland was a preliterate society, with no written records saved from the time or discovered in archeological study. Most written information about medieval Greenland came from two sources: the Icelandic Sagas, written down much later in Old Norse; and the Icelandic Annals, written down yearly in Latin. The sagas gave heroic narratives, not historical fact. While the annals were accurate journals, they concentrated on the more Europeanized Eastern Settlement, which had more contact with Iceland and Norway due to its location and inhabitants.

Secondly, modern scholarship focused on the larger and easily accessible Eastern Settlement to the south, which still had visible ruins from a gradual collapse at the end of the 1400s. Medieval Icelandic literature also gave more focus to the Eastern Settlement with which it had more contact. The Western Settlement took many hours to reach, deep in a multi-fjord system connected only at the coast. In addition, high tides and silt coming into the fjords from nearby glaciers limited accessibility.²³ When finally examined, the ruins of the Western Settlement contained many artifacts for study, showing evidence of a sudden evacuation or collapse in the 1340-60s. These rich finds stimulated study of the Western Settlement in its own right.

²³ Aage Roussell, "Farms and Churches in the Mediaeval Norse Settlements of Greenland," reprint from *Meddelelser om Grønland [Reports on Greenland]*, #89 (Copenhagen: C. A. Reitzels Forlag, 1941), 17-18. Austmannadal had rich farms rivaling Sandnes, now inaccessible due to silt from glaciers. In 1765-75, Ameragdala fjord was still accessible, without clay and gravel clogging the fjord.

While archeologists mapped out much of the Western settlement by the 1930s, this period also included a deep rift between the two countries most interested in the research, Denmark and Norway. The main question was modern, as both countries claimed Greenland: “which of the two nations was better fitted to govern Greenland.”²⁴

Norway came under Danish rule with the Kalmar Union in 1397. At the end of the Napoleonic Wars, the Treaty of Kiel awarded Norway to Sweden as a war prize in 1814. The Danes acquired Greenland, the Faroes, and Iceland, although Norway continued to use the East Coast of Greenland for sealing and hunting.²⁵ A fight over ownership erupted between the two countries in 1931. Denmark filed suit in the World Court, winning total control of Greenland in a judgment of 5 September, 1933.²⁶ Feelings between the two countries ran high: “For a year every Dane and Norwegian who met fought their own private war of claims.”²⁷ This fight led to a break between Norwegian and other Nordic archeologists, avoiding Norwegian interpretations of the Norse farms. Research suffered from national compartmentalization, ignoring larger political unions and economic trading in northern Europe which affected the Norse.²⁸

²⁴ Fyllingsnes, 231.

²⁵ *Time Magazine*, “Norway-Denmark: Brother Christian Wins,” April 17, 1933, <http://www.time.com/time/magazine/article/0,9171,847290.00.html> (accessed 16 October, 2011). Denmark acquired the Atlantic colonies on the statement by an Irishman Edmund Bourke: “These colonies have never belonged to Norway.” Norway owned the colonies since the 1260s, but missed the transfer, having lost their newly declared independence of May 17, 1814, to a union with Sweden until 1905. Denmark used only West Greenland until 1917, when it claimed the entire island, increasing activity in 1931. Norway retaliated by claiming a 350 mile strip of the eastern coast in 1931, naming it “Eric the Red Land.”

²⁶ World Court, “Legal Status of Eastern Greenland, Denmark v. Norway, Judgment, 5 September 1933, Permanent Court of International Justice (PCIJ),” http://www.worldcourts.com/pcij/decisions/1933.04.05_greenland.htm (accessed 13 October 2011).

²⁷ *Time Magazine*, “Norway-Denmark: Brother Christian Wins.”

²⁸ Keller, *The Eastern Settlement Reconsidered*, 5, 17, 109.

Fieldwork by the 1976-77 Inuit-Nordbo Project changed this pattern of limited collaboration, and used a multi-disciplinary team with access to carbon dating. By examining the middens of three farms, they showed continued life in certain valleys after the larger community disappeared.²⁹ Thomas Howatt McGovern did an analysis of this project as his dissertation from the University of Michigan, using examination of seeds and larvae, fauna and flora, climatic conditions, and other physical factors.³⁰

Greenland was on the edge of the European world, and has remained there as an object of historical study. Three key writers helped stimulate interest in Greenland. Fridtjof Nansen brought world attention to Greenland by making the first crossing of the Greenland icecap in 1888, ending at Austmannadalen in the Western Settlement.³¹ He influenced historians by claiming the Norse were incapable of surviving on their own due to their diet without wheat, and merged with the Thule in a native lifestyle.³²

In the 1960s, Helge Ingstad and his wife Anne Stine, an archaeologist, discovered an ancient Viking settlement in Newfoundland, which they name l'Anse aux Meadows. This proved the hypothesis that Leif Eriksson travelled from Greenland to America due to the similarity of the buildings found in Greenland and Newfoundland.³³

²⁹ Claus Andreasen, "Nipaitsoq og Vesterbygden [farm Nipaitsoq and the Western Settlement]," *Grønland [Greenland]*, 5-6-7, 1982, Charlottenlund, Denmark: Det Grønlandske Selskap. Tema: Nordboerne (Theme, the Norse) 1: 188. Study sponsored by the Nationalmuseet (National Museum) and Kalaallit Nunaata Katersugaasivia (Grønlands Landsmuseum, Greenland National Museum).

³⁰ McGovern.

³¹ Daniel Bruun, "Arkæologiske Undersøgelser, Godthaabs og Frederikshaabs Distrikter i Grønland" ("Archeological explorations in Godthaab and Frederikshaab districts in Greenland"), *Geografisk Tidsskrift [Geographic Journal]* VII, 1903-04: 10. Nansen gave the valley its name.

³² Fridtjof Nansen, *In Northern Mists: Arctic Exploration in Early Times*, vol. 2, translated by Arthur G. Chater (New York: AMS Press, 1969, reprint from 1911), 96, 100.

³³ Wahlgren, 124-129. Overall this stimulated further research about the Norse colonies.

Jared Diamond brought Greenland into recent popular literature with his book *Collapse: How Societies Choose to Fail or Succeed* in 2005. He blamed the Norse for being too European and not adapting to Arctic conditions, a theory fairly accurate for the Eastern Settlement. However, he lacked historical accuracy when he doubted that the Norse hunted walrus themselves, and said they had a prohibition against eating fish.³⁴ He brought the demise of the Norse settlements to world attention, concurrent with the melting Greenland icecap as scientists discussed global warming.³⁵

Research on the Western Settlement in Greenland has moved beyond single factor theories and nationalistic teams focused on parts of the available evidence. Danish and Icelandic historians once blamed the Norwegian monarchy for forcing union on the Greenland settlements in 1261, while Norwegians blamed Danish monarchs for losing contact with Greenland. These theories have faded with modern archeological and climatic data, as has the fight between Norway and Denmark, who competed more fiercely for Greenland than the Norse and Thule ever did. Multi-disciplinary researchers now provide a sophisticated synthesis of archeological excavation, climate and ice core analysis, and examination of plant and animal remains. The University of Greenland at Nuuk has the most collection of studies, although records remain scattered in Denmark, Norway, and Iceland. Another resource is an excellent bibliography by Kenneth Miller of studies about Greenland.³⁶

³⁴ Diamond, 229, 261.

³⁵ *National Geographic*, "Global Warming: Greenland When It's Hot," <http://www.nationalgeographic.com/adventure/adventure-travel/greenland/global-warming.html> (accessed 22 October, 2011).

³⁶ Kenneth E. Miller, *Greenland* (Oxford: CLIO Press, 1991).

Missing from the historiography to date was a thorough assessment of the relationship between the Eastern and Western settlements. This relationship was central to the departure of the Western settlers, who found themselves increasingly at odds with the changing political and economic structure of the Eastern Settlement. While the hunters lost their livelihood and felt the cooling climate far sooner than their southern relatives, they were neither blind nor dumb; they could see the numerous church building at Gardar, and the growing wealth of the Eastern Settlement. There was also greater stratification of classes, and excessive usage of imports by the upper class in the Eastern Settlement. Thomas McGovern covered many of the changes in his dissertation without specifically tying in the discontent of the Western Settlement. Christian Keller documented a possible uprising in Greenland in the 1270s between the church and laypeople, again not tying it specifically to the Western Settlement.³⁷

Studying the history of the two settlements showed deep political and economic differences leading to the departure of the settlers of Western Settlement, who displayed their discontent by not sending word on where they were going to the Eastern Settlement. They apparently tore down one church in protest at departure (the Thule never touched churches in the Eastern Settlement). In 1923, Hans wrote of the badly collapsed church ruin at Ujaragssuit near Godthaab: "I have since asked the savages if they had destroyed this stone building, but they answered that the Norwegians themselves did it when they left the country; that is all they know about this."³⁸

³⁷ Keller, *Eastern Settlement Reconsidered*, 144.

³⁸ Poul Nørlund, *Viking Settlers in Greenland and their descendants during Five Hundred Years* (New York: Krause Reprint Co., 1971, Reprint, original Copenhagen: G. E. Gads Forlag, 1936), 139.

Chapter 3

ESTABLISHMENT OF THE WESTERN SETTLEMENT

The story of the Greenland settlements actually started much earlier on the western coast of Norway with its poor farmland and increasing violence in the 800s. Pagan Vikings at this time, they were hot-tempered and quick to take offense, leading to blood feuds among families for the slightest provocation.³⁹ In an atmosphere of “survival of the fittest,” they wanted their own privately owned living space away from arbitrary rule, especially when Harald Fairhair imposed himself on local autonomy in becoming the first king of Norway. Norse sailors discovered Iceland in around 874, leading to an exodus of Norwegians on the wrong side of Harald’s reign. They formed the first democratic parliament in the world called the *althing*, and never voted for a king.⁴⁰

As the best land in Iceland filled up, refugees continued to flee Norway until about 930.⁴¹ The first settlers got parcels on the south and west coasts, with the warming influence of the Gulf Stream, whereas late-comers had to settle for land on the north and east coasts, hit by the polar currents. Iceland was a land of contrasting beauty and desolation, with much unusable land due to glaciers, volcanoes and geysers, but it gave them freedom: “To them, the mere interference in their personal independence was a far more heinous thing than any tax they would have had to pay. The latter was a negligible factor in their impetus to get away.”⁴² They voted for their leaders and taxes.

³⁹ Enterline, 3-4.

⁴⁰ Enterline, 4. Head of the *althing* was the lawspeaker, an elected position based on merit.

⁴¹ James Graham-Campbell, *The Viking World* (New York: Tricknor and Fields, 1980), 82.

⁴² Oxenstierna, 247.

Along with the settlers went people banished for murder for a set period of time, as Norway had no death penalty. In about 960, Thorvald Asvaldsson got in difficulty killing one of King Håkon the Good's men.⁴³ Arriving in Iceland after the first settlers, he ended up on the cold and rocky northwest coast. His son Erik Thorvaldsson had a fiery temper to match his red hair, earning the nickname Erik the Red. Not surprisingly, Erik got into a blood feud ending in murder in 982, receiving a three year banishment.⁴⁴

Erik remembered stories about a man named Gunnbjörn Ulfsson being blown off course in about 900 and discovering very small islands that he named for himself, "Gunnbjörn's Skerries," between Iceland and a large unnamed place.⁴⁵ No one raced to explore the ice-covered mainland, until Erik visited it in 982. While what Erik named Greenland was two hundred miles from Iceland, both had mountains so high that sailors could see Snœfellsness in Iceland and Angmagsallik in Greenland when halfway across the Denmark Strait.⁴⁶ During his three years of banishment, Erik lived off the land hunting and fishing, and visited every fjord on the southwest side of this new land; he returned to the coast before winter to avoid being locked in the fjords by pack ice.⁴⁷

⁴³ *Norsknettskole [Norwegian Internet School]*, "Håkon den gode [Håkon the Good]. <http://www.norsknettskole.no/fag/ressurser/itstud/fuv/steinma/hakon.html> (accessed 21 November 2011). Håkon was the youngest son of Harald Fairhair, and won the position by a vote of the people. His oldest brother Erik Bloodaxe ruled only two years before being kicked out for violence, and ending up in England as a blood-thirsty ruler in York. Håkon won the position by merit, not by birth order, and ruled wisely, earning the nickname "the good." Håkon brought Christianity to Norway; however the people rejected this and continued worshipping Odin and Tor.

⁴⁴ Graham-Campbell, 78. The Norse used a patronymic form as last name, with sons taking father's first name with son or sen added, daughters adding datter to father's first name, i.e. Thorvald Asvaldsson, Erik Thorvaldsson, Leif Eriksson, Freydis Eriksdatter (Erik's daughter).

⁴⁵ Oxenstierna, 249.

⁴⁶ Holger Arbman, *The Vikings: Ancient Peoples and Places*, translated and edited by Alan Binns (London: Thames and Hudson, 1961, 1965), 110.

⁴⁷ Oxenstierna, 249.

Erik Thorvaldsson used his time of banishment well, and returned to Iceland with a solid plan for new settlements. Since both he and his father received banishment for murder, it made sense to find new lands less crowded, where he had a chance of starting over and staying out of trouble.⁴⁸ He had no trouble finding recruits among latecomers to Iceland who had poor land, as he told stories of beautiful pastures and excellent hunting. Erik was a shrewd man, and picked the name Greenland to gain more settlers. The name had merit, as Greenland was far greener than Iceland in summer; also the ends of the fjords had rich grass, and warmer summers than Iceland.⁴⁹

In 986, Erik the Red led twenty-five ships from Iceland to Greenland, with the heavily laden ships carrying 500-700 men, women, children, their domestic animals, cooking tools, and farm equipment. Fourteen of the ships made the trip to Greenland, with the other eleven either sinking in storms or returning to Iceland.⁵⁰ The survivors founded two prosperous settlements on the southwestern coast of Greenland, which was warmer and had less ice than the eastern coast due to the Greenland Current from the Arctic (see map next page).⁵¹ Erik took the best farm for himself as the leader of the colony at Bratthild in the larger, more prosperous Eastern Settlement. He also claimed the Sandnes farm in the Western Settlement for the eventual leader of that settlement.⁵²

⁴⁸ Enterline, 8-9.

⁴⁹ W. A. Graah, *Narrative of an Expedition to the East Coast of Greenland Sent by Order of the King of Denmark, in Search of the Lost Colonies*, translated from Danish by G. Gordon MacDougall (New York: AMS Press, 1978, reprint of original, London: John W. Parker, 1837), 1.

⁵⁰ Oxenstierna, 250.

⁵¹ *The King's Mirror [Speculum Regale - Konungs Skuggsjá]*, written ca. 1250 in Norway, translated from Old Norwegian by Laurence Marcellus Larson (New York: The American-Scandinavian Foundation, 1917), 138.

⁵² Seaver, *The Last Vikings*, 21. While presumably a member of his family, this was unclear.

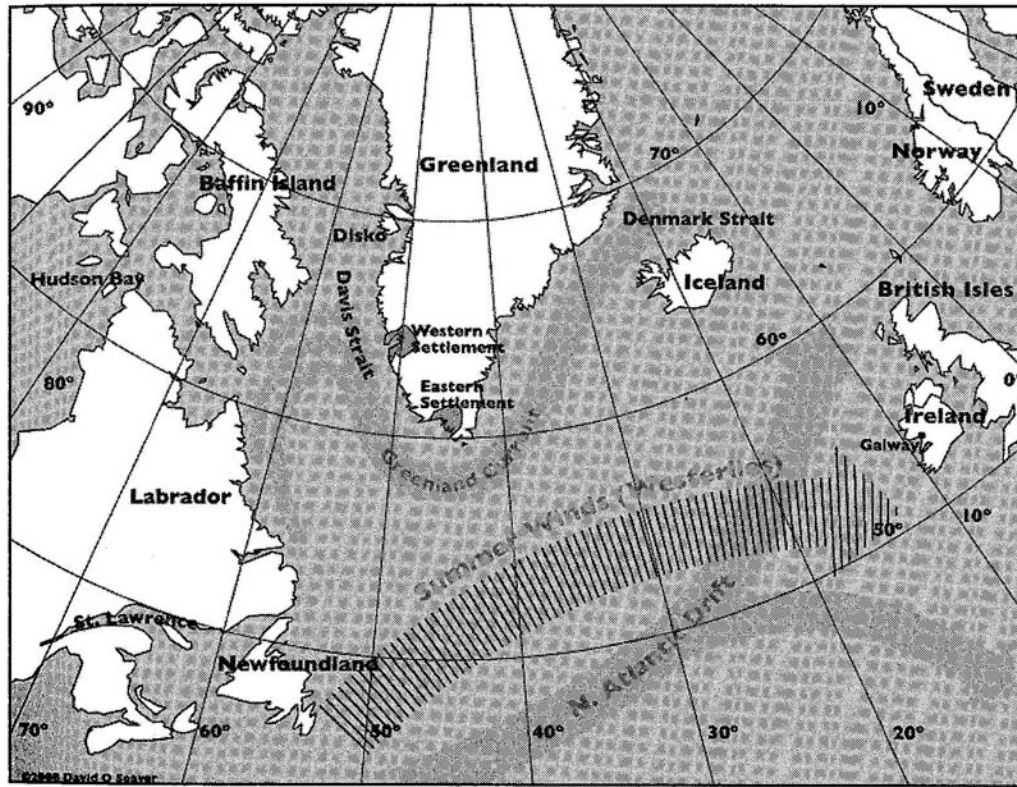


Figure 1: Map of the North Atlantic⁵³

Naming the two colonies as the Eastern and Western Settlements seemed a bit strange to later generation; to Erik the Red, the latter colony was west in terms of longitude.⁵⁴ Important to the Norse were the main hunting ground Nordrsetar near Disko Bay, and the Vestri Obygd on Baffin Island at Cumberland Sound.⁵⁵

⁵³ Seaver, *The Last Vikings*, map by David O. Seaver, xxi. The Greenland Current flowed from the Arctic, bringing sea ice down the eastern coast of Greenland and around to the west coast, frequently blocking entrance to the Eastern Settlement. The current turned toward Baffin Island at the latitude of the Western Settlement, moving the sea ice away from the coast, and making it an easy sail across the Davis Strait. It was easier to take the current south to Labrador and catch the Summer Westerlies back to Greenland or Iceland, than to fight the Greenland Current going south on the west coast of Greenland. Baffin Island and Labrador were more accessible to the Western Settlement than Iceland or Norway.

⁵⁴ Finnur Jónsson, *Det gamle Grønland Beskrivelse af Ivar Bårdssøn [The Old Greenland's Descriptions by Ivar Bårdssøn]* (København: Levin & Munksgaards Forlag, 1930), 29.

⁵⁵ Mowat, 332-33. Translations: *Northern Seter, Western Wilderness*. Eastern and Western settlements also known as Ostrebygd and Vestrebygd in Old Norse, as one of several spellings.

The Eastern Settlement had more pasturage and easier winters than the Western Settlement; in addition it was closer to Iceland and Norway for trading. While it looked like the better location, it also had more drift ice from the east coast. Ships had trouble getting through this drift ice even in summer. Its many fjords opened directly to the coast, which left it at risk for pirate raids in the 1400s.⁵⁶

The biggest drawback of the Eastern Settlement was that it attracted important men from Iceland, who began to compete as to whether Bratthild or Gardar was the main farm, along with Hvalsey and Herjolfsness.⁵⁷ Erik lived at Bratthild which was the center of the settlement during his life; however, what the Greenlanders called a cathedral appeared later at Gardar, with numerous church buildings (despite the fact that they rarely had a bishop, and never an archbishop). The settlement also attracted the status-seeking behavior of Icelandic and Norwegian society, including up-to-date European fashions. Clothing at Herjolfsness came from the styles of the 1400s in Europe, somehow reaching Greenland.⁵⁸

Four hundred kilometers to the north (250 miles), the Western Settlement was far from civilization: “Then there is six days’ rowing in a six-oared boat with six men to Vestri Bygd.” This was from the Mid Bygd half way between the settlements.⁵⁹ Not every one handled being so far from civilization, and some returned to the Eastern Settlement. As mentioned, the Greenland Current made the trip south difficult.

⁵⁶ Seaver, *The Frozen Echo*, 175.

⁵⁷ Seaver, *The Last Vikings*, 21.

⁵⁸ Lindegaard, 33. The Eastern Settlement kept going until the end of the 1400s.

⁵⁹ Ólafur Haldórsson, “An ancient description of Greenland,” English translation by Joan Turville-Petre, *Medieval Scandinavia*, 12, 1988: 245. Bygd was Norse for a settlement. The middle settlement apparently died out early, and has little mention in accounts of the settlements.

Sailing within the fjord system to the separate parts of the Western Settlements was difficult due to winds. The ninety farms of the Western Settlement were placed back in ten fjords off four major fjord systems with three main farms due to the distance. Well-hidden from the coast, the settlement had tricky tides and fierce winds, giving it natural protection from pirates. Its biggest advantage was being closer to the hunting grounds at Disko Bay. Also, it was further away from “civilization,” including the Eastern Settlement, giving the settlers a greater sense of freedom.

Despite being far away, the opening of the fjord system near Godthaab (Nuuk) had importance for the Western Settlement. Here the settlers gathered wood for their fires and buildings, as salt-soaked driftwood came to the coast of Greenland from as far away as Siberia, and from shipwrecks.⁶² Whales beached themselves at the coast, giving good flesh for food, blubber for lighting homes, and bone for tools. Most importantly, the harp seal spent its summers at the coast.⁶³ As a disadvantage, the bottleneck where the fjords emptied into the ocean made the settlement a natural trap.

The Greenland settlers adapted to the challenges of the North, which they experienced in both Norway and Iceland. While the topography of the Western Settlement was severe without trees, the settlers adapted easily to this terrain, so like Iceland and northern Norway but with better summer weather. They were used to marginal farms supplemented by a hunting lifestyle, and adapted to what they found.

⁶² Roussel, 22. Driftwood of tree trunks ten meters long could pierce a ship on contact. This driftwood could be used for firewood and framing buildings, but not for ships that needed fresh wood.

⁶³ McGovern, 111-12. Harp seals pupped off South Labrador in March, and moved to Greenland when the pups were able to swim, spending late May and June at the Western Settlement eating capelin.

However, living in an isolated fjord system was difficult because of the sudden, severe storms. Greenland had a unique climate due to its geography. While the southwestern coastal regions of Greenland had the fjord systems with green grasses, the vast interior of Greenland was a massive spine of granite between two and three kilometers in height, topped by a vast sheet of ice of equal thickness. This interior ice led to extreme changes of weather in Greenland, affecting travel up the fjords:⁶⁴

I shall tell you something about the nature of the land. When storms do come, they are more severe than in most other places, both with respect to keen winds and vast masses of ice and snow. But usually these spells of rough weather last only a short while and come at long intervals only. In the meantime the weather is fair, though the cold is intense. For it is the nature of the glacier to emit a cold and continuous breath which drives the storm clouds away from its face so that the sky above is usually clear.⁶⁵

Being so far inland and close to the glaciers did have advantages, as the ends of the fjords in the Western Settlement enjoyed a continental summer with more sun, less wind, and warm, drier weather than the Eastern Settlement closer to the coast. Sandnes was in a glaciated bowl, as were most of the larger farms, with ample grazing around the site and up the mountain. Goats grazed the steepest hills, giving milk and cheese products, while sheep stayed outside all winter with their thick coats, providing the wool for Greenland's famous woven vadmål, a very soft and warm cloth. Seters, or small summer farms in the mountains, gave excellent pasturage in the mountains for sheep and goats grazing on their own, with the medium sized dogs of the settlers for herding and protection. The Norse also cut hay at mountains patches.⁶⁶

⁶⁴ Seaver, *The Last Vikings*, 31.

⁶⁵ *The King's Mirror*, 153.

⁶⁶ McGovern, 133-37.

Although Arctic, it had richness in its nature. Numerous lakes and streams from the icecap gave good sources of drinking water. Clay soil trapped water at the top in marshy areas, keeping the pastures wet and producing mushrooms and berries.⁶⁷ The *Kongspillet [King's Play]* in the early 1200s proclaimed: "But most of them do not know what bread is, and have never seen bread!"⁶⁸ However, the settlers raised linseed, knot grass, chickweed, and angelica, and also used lyme grass, iceland moss, and reddish seaweed dulse with a salty sweet taste.⁶⁹ On a good day, Greenland fit its name:

You ask what the inhabitants live on in that country since they sow no grain; but men can live on other food than bread. It is reported that the pasturage is good and that there are large and fine farms in Greenland. The farmers raise cattle and sheep in large numbers and make butter and cheese in great quantities. The people subsist chiefly on these foods and on beef; but they also eat the flesh of various kinds of game, such as reindeer, whales, seals, and bears.⁷⁰

A great strength of the settlement was that it provided ample high quality protein for the settlers' overall health. Their small cows gave the highest quality protein on the least grazing area. Now extinct, they were similar to the small medieval cows of Denmark, light-boned, highly resistant to cold and damp, and tougher than modern cows.⁷¹ A main staple of the settlers was creamy skyr coming from milk and processed

⁶⁷ McGovern, 129. Norwegians have a long tradition of picking mushrooms and berries.

⁶⁸ Jørgen Meldgaard, "Landmandsliv i Grønlands Nordbotid [Peasant life in Greenland's Norse Period]," *Handle [Trade]*, 19 January 1950: 98. Norwegian text: "Men de fleste I det ved dog ikke, hvad Brød er, og har aldrig set Brød!"

⁶⁹ Seaver, *The Last Vikings*, 32.

⁷⁰ *The King's Mirror*, 145.

⁷¹ McGovern, 123-31.

with rennet, which lasted all winter. Whey (a thick, acidic bluish liquid made from soured milk) was both a drink and food preservative, valuable for its rich milk sugars.⁷²

Pigs did not thrive that far north in Greenland, so the Norse used three types of seals in lieu of pigs, with up to 70% seal bones in the midden (trash heaps) of smaller farms. The high status Sandnes farm had less than twenty-five percent seal bones in its midden, preferring to eat beef and caribou. The harbor seal (common seal) hauled out on flat rocks or sandy beaches to breed and pup in late May to July near Sandnes Farm, providing high quantities of seal meat to the entire settlement. The settlers hunted the harp seal at the coast, while the hooded seal was rare at the Western Settlement.⁷³

Additionally, fish abounded in both the fjords and mountain lakes; *Lysufjord* got its name from *lysa*, a type of cod, while *Agnafjord* came from *agn*, or fishing.⁷⁴ Perfect suited for a windy, cold, and bright climate, Atlantic cod ended up on racks drying into stockfish in Greenland, and provided food on voyages and hunts “spread with butter or blubber for more calories.”⁷⁵ Nine years before Diamond’s comment about the Norse having a prohibition against eating fish, Kristin Seaver, a naturalized American writer of Norwegian birth, solved the issue of the Norse supposedly not eating fish in her 1996 book *The Frozen Echo: Greenland and the Exploration of North America ca A.D. 1000-1500*. Medieval Norwegian sites also lacked fish bones and fish heads, for these were too valuable to throw away; rather they were ground into valuable protein powder to

⁷² Seaver, *The Last Viking*, 35. *Skyr* is a type of strained yogurt, classified as a very soft cheese.

⁷³ McGovern, 107-08. The common seal avoided sea ice, and liked both the climate and water temperature of the Western Settlement. The hooded sea predominated near the Eastern Settlement.

⁷⁴ *Grønlands Historiske Mindesmærker*, 879-80.

⁷⁵ Seaver, *The Last Viking*, 33. Iceland and Northern Norway used the same drying technique.

feed cattle and horses. From her own childhood, Seaver remembered Norwegians grinding fish bones into protein powder for human use during World War II.⁷⁶

Two other sources of protein came from caribou and whales. Ameralik and Kangarsuneq Fjords still have the best caribou hunting in Greenland, in the mountains behind the Western Settlement. The Norse killed animals that walked by the farms even in the dead of winter, as the caribou scratched through the snow to find reindeer moss, and used valley bottoms for shelter from winter storms.⁷⁷ The Norse had two types of dogs, one of medium size presumably for herding, and a larger type like a long-limbed deerhound. These large dogs drove the caribou down to the fjord to kill, or through lines of waiting hunters, and even brought down wounded animals on their own.⁷⁸ Whales beached at the coast, and, as noted, provided flesh, blubber, and tools.⁷⁹

From the start, the Western Settlement had minimal subsistence farming due to the northern latitude, and focused on hunting and fishing. Before the climate cooled, the Western Settlement did well, with functional farms and ample hunting. Overall, the Western Settlement had many advantages to living in the Eastern Settlement, at least for those tough enough to handle the isolation, sudden storms, and long winters. It was a peaceful beautiful setting, both isolated and connected to others at the same time as they hunted communally. They had plenty of room between farms, which had been carefully placed, with a one-kilometer radius for farms with good pasture and five-kilometer

⁷⁶ Seaver, *The Frozen Echo*, 56-57.

⁷⁷ McGovern, 122-23. The Norse farms were in the same sheltered valleys used by the caribou.

⁷⁸ McGovern, 119-20, 139-40.

⁷⁹ *The King's Mirror*, 120-124. These whales included the humpback, right whale, and rorqual (probably blue whale).

radius for poorer mountainous farms.⁸⁰ It presumably took a special kind of personality to survive there, something Erik the Red recognized in the beginning.

⁸⁰ McGovern, 152.

Chapter 4

THE COLONISTS IN THE SETTLEMENT

When Erik the Red brought settlers to Greenland, he had two types of settlements where they could live. He himself lived in the larger settlement, with his farm Bratthild soon competing with Gardar as the largest farms. This was a European community, with the desires for higher social standing of contemporary Icelandic society. The Western Settlement was two hundred and fifty miles north, and not for weak or fearful settlers. Erik knew that this outpost, far from civilization and society, fit the personalities of some of his men. They were self-reliant and happy with a hunting lifestyle, preferring to explore new spaces and less likely to adjust to the more European Eastern settlement.⁸¹ In addition, they were skeptical about organized religion, and still communal in sharing resources, a trait from Viking times.

Of the fourteen ships that survived the trip from Iceland, two or three of the surviving shiploads went to the Western Settlement.⁸² From the start, they preferred the freedom and isolation of the settlement away from political domination. They explored hunting grounds up the coast of Greenland to Disko Bay, Inugsuk Island, and further north at Crooked Fjord Heath at the northwestern tip of Greenland.⁸³ Here they found polar bears, walruses, gyrfalcons, and narwhales with an unusual long straight tooth.⁸⁴

⁸¹ Enterline, 1972), 148.

⁸² Pohl, *The Viking Explorers*, 46. There were three churches and main farms in the Western Settlement, so the number was probably three ships. Historians originally thought that settlers went to the Western Settlement in the next generation; carbon dating showed they were established at the same time.

⁸³ Holand, 104-5.

⁸⁴ *The King's Mirror*, 122. The narwhal strongly resembled the mythical unicorn.

The most important animal in the hunting ground was the walrus, rated by Greenlanders as a whale, but really a seal, and valued for its tusks and skin:⁸⁵

Its appearance is distinguished from that of other seals in that it has, in addition to the other small teeth, two large and long tusks, which are placed in the front part of the upper jaw and sometimes grow to a length of nearly an ell and a half. Its hide is thick and good to make ropes of; it can be cut into leather strips of such strength that sixty or more men may pull at one rope without breaking it.⁸⁶

When they went out hunting for walrus in large groups, they were pressed for time and had to work fast, killing mature males, females, and adolescents, which was wasteful. Most households sent hunters to the northern grounds in the summer months. Other hunters stayed out all year, and hunted polar bears at a more leisurely pace.⁸⁷

There was a rhythm to their seasons. Hunting often took several months, at great distance from the settlement. At the mouth of their fjord system, they hunted harp seals in the spring from a small island in the Angissunguaq group where they lived, and went out either to catch the harp seals, or bring in a beached whale.⁸⁸ Before the fall hunting came the vital haying season in mid to late August, as they cut every patch of fodder and even rough brush and sea weed to get the animals through the winter.⁸⁹ They collected guillemots in late summer, butchering the partly flightless sea birds in a seasonal glut, before taking advantage of seasonal caribou migration in the autumn. In the winter they stayed inside, using foods stored in *skemmas* to survive the cold.⁹⁰

⁸⁵ *The King's Mirror*, 140.

⁸⁶ *The King's Mirror*, 140. An ell was the length of a man's arm, and varied by country.

⁸⁷ McGovern, 190-91. Hunters who stayed all winter included those banished as outlaws.

⁸⁸ McGovern, 159; Meldgaard, "Landmandsliv," 99.

⁸⁹ McGovern, 170-71.

⁹⁰ McGovern, 172-75. The Norse air-dried meats in these huts, and protected it from scavengers.

While they valued their freedom, they retained the democratic tradition of communal hunting and sharing resources from the Viking times.⁹¹ Norse society never developed the aristocracy of better off countries like Denmark and Sweden, and chieftains held power only as long as they could effectively lead.⁹² Rich and poor alike had to work hard, and cooperate with each other as the community was too marginal for a nonworking aristocracy.⁹³ They survived by hunting walruses, caribou, seals, and polar bears in groups of 18-20 men; it was dangerous work, but there was safety in numbers. It also fit their Viking traditions of sharing both the hazards and benefits, making sure everyone got part of the bounty. While the seals pupped near Sandnes, this was communal property shared with small farms away from the fjords.⁹⁴

There was a definite pecking order to Norse society, but the leaders also had the responsibility for decision making and subsidizing poorer farms in bad years.⁹⁵ The largest farms had more acreage and better food, eating more beef and caribou than the poorer farms living on seal and goat meat; however, they all had enough to eat. The leaders organized the hunt and harvest schedules, kept the extra replacement animals and the bull, and helped the small farms in time of need. The larger farms in the Eastern Settlement benefitted the most from the hunt for luxury goods, as they entertained the traders who came, and were less devastated by hunting accidents.⁹⁶

⁹¹ Meldgaard, "Landmandsliv," 100. As Vikings, they did not complain or ask for help.

⁹² Seaver, *The Last Viking*, 41. Norway also never developed a nobility, unlike Sweden and Denmark which were more prosperous due to extensive farmlands, unlike Norway with 3% farmland.

⁹³ Seaver, *The Last Viking*, 41-42.

⁹⁴ Diamond, 235. Norwegians still hunt moose in groups, sharing the animal between hunters regardless of who shoots it. A group in Skien, Norway, splits the moose between twelve hunters.

⁹⁵ Diamond, 232-33.

⁹⁶ McGovern, 193-95. Small farms in the Western Settlement had less men to spare.

The inhabitants of this community understood the pattern of their lives, but not of religion. Although Christianity came to Greenland shortly after the first settlers, the men in the Western Settlement never saw any real benefit from organized religion. The women embraced the new faith, but the men preferred the masculine Viking gods like Thor, regarding Christianity as a “contemptible and lily-livered faith.”⁹⁷ Their leaders built the three small churches as expected, but avoided the church complexes of the Eastern Settlement. Walrus tusks, live animals, and furs from their hunting essentially supported the tithing and trading for the entire colony, but this was due to a love of hunting and fishing, called *fangst*, rather than any love of civilization or the church.⁹⁸

Their lack of religious understanding stemmed partly from belonging to a pre-literate society, with the largest farmers serving as priests. The Norse lacked paper and parchment, keeping oral tales and religious stories alive in verbal form.⁹⁹ Early writing in Scandinavia was on runic stones that left cryptic messages from a limited alphabet.¹⁰⁰

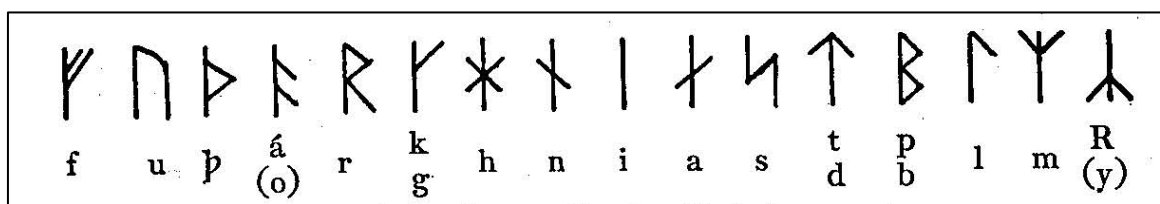


Figure 3: The Later Runic Alphabet

⁹⁷ Mowat, 74. From the sagas, Christianity came to Greenland in about 1000 with Leif Eriksson, son of Erik the Red (who remained pagan to his death). Leif’s mother embraced the religion with the other women of the settlement. Paganism was probably present in both settlements to varying degrees.

⁹⁸ Fyllingsnes, 86.

⁹⁹ Enterline, 5, 7. Literacy came later to Scandinavia than many parts of Europe. When the farmers served as priests, they had to remember religious verses as oral tradition from earlier priests.

¹⁰⁰ Jones, 35. The sixteen symbols could signify different sounds; reading them requires thorough knowledge of Old Norse.

Runic stones were the only records left in the Western Settlement and northern hunting areas of Greenland. They had limited information as it took time to carve the inscriptions. One example was a runic stone found at Kingittorsuaq above the hunting grounds at Disco Bay in the High Arctic from the 1300s. Found at a tall cairn (pile) of stones, it bore the inscription: “Erling Sighvatsson and Bjarni Thordarson and Eindridi Oddsson on the Saturday before the minor Rogation Day [April 25] piled these cairns.”

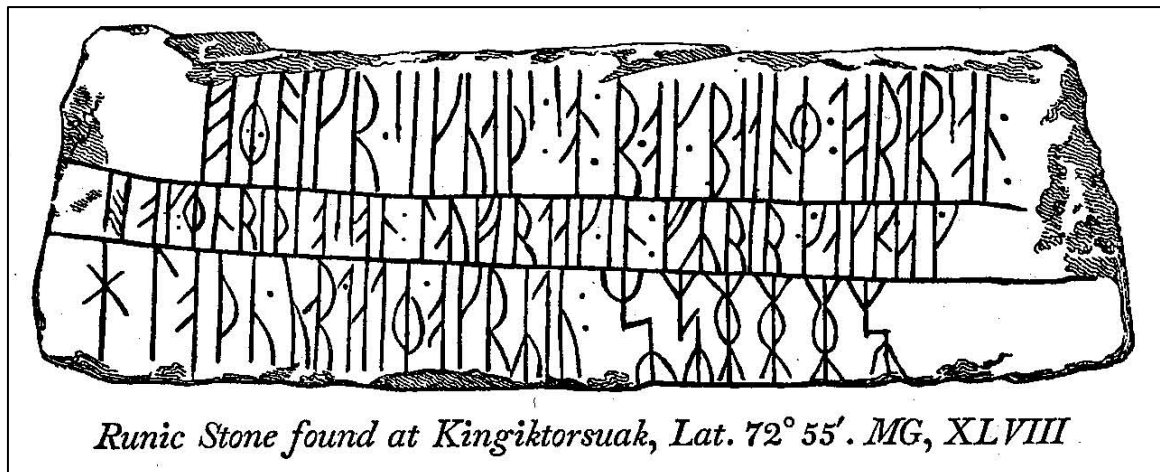


Figure 4: Runic Stone from Island of Kingittorsuaq¹⁰¹

Imparting the essence of the Christian religion would have been difficult on these stones, even with interested subjects. The men in the Western Settlement preferred the outdoors, as they were a very fit group. The above stone suggested that they stayed out all winter hunting, as it was too early for ships to make the trip north. They came from the tradition of exposing sickly infants in Iceland, hardly a Christian philosophy.¹⁰²

¹⁰¹ Jones, 80. Most authors use 1333 as the date, as a date of 1125 was impossible linguistically.

¹⁰² Pohl, 69.

As peasants, they used what they found. Their clothing was well adapted to northern conditions, as the Greenlandic sheep provided high quality wool for weaving warm clothing, and their woven vadmål sold well in Europe. Between driftwood, small bushes, and animal dung, they had ample heating for their houses.¹⁰³ Collecting feathers for eider down quilts in the high Arctic, they exported eider down to Europe.¹⁰⁴

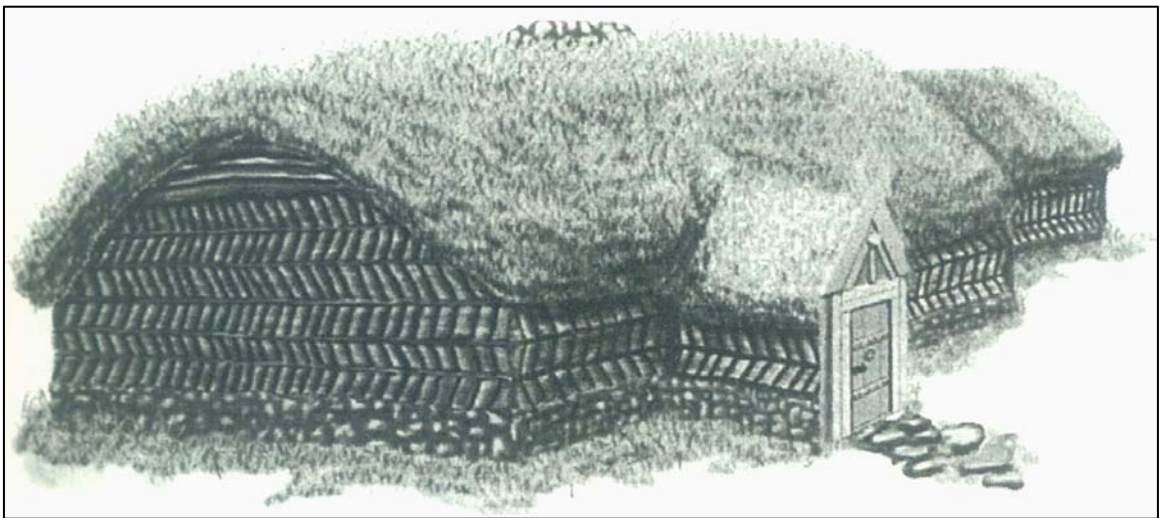


Figure 5: Medieval Turf-and-Stone Norse House¹⁰⁵

The Norse had a long history of successful living in an extremely cold climate. Both Norway and Iceland had marginal farmlands, and they took their sustenance from fishing and hunting instead.¹⁰⁶ They built warm houses using local stones for walls, turf for filling the walls and roof, and driftwood and whalebones for framing buildings.¹⁰⁷

¹⁰³ Roussell, 24. Housewives burned sheep manure and greasy bones, not wood chips and sticks.

¹⁰⁴ Enterline, 22.

¹⁰⁵ Seaver, *The Frozen Echo*, drawing by David O. Seaver, 49.

¹⁰⁶ Ari Thorgilsson, *The Book of the Icelanders* (c. 1125), translated by Halldor Hermansson (Ithaca, NY: Cornell University, 1930), 131.

¹⁰⁷ Krogh, 54. Homes were well insulated with turf, while barns had cracks for ventilation.

The Norse settlers were creative in using whatever they found in building materials. As excellent seamen, they traveled between the scattered farms and hunts in small boats with six-oars.¹⁰⁸ From Markland (Labrador), they got the timber to build their small ships adapted to ice conditions, as noted in the 1347 Icelandic Annals:¹⁰⁹

There came also a ship from Greenland that was smaller than the small Icelandic vessels. She put in at Ytre Straumsfjord. She had no anchor. There were seventeen (some say eighteen) men aboard; they had sailed to Markland [Labrador] but were afterwards driven hither by storms.¹¹⁰

They worked bog iron into crude iron blooms at hearth pits in Newfoundland.¹¹¹

Lacking iron nails and rivets, some used whale baleen and thongs.¹¹² One creative builder Ásmund kastanrassi (“Wriggle-Ass”) sailed in 1189 from Greenland to Iceland in a ship “held together with wooden pegs and baleen or sinew lashing.”¹¹³

The Norse were independent, resilient, and adapted to living a subsistence lifestyle on the edge of civilization. What they prized most was their freedom, and this they had in Greenland for three hundred years.¹¹⁴ But trouble loomed as it got colder, the Thule outnumbered them in the hunting grounds, the Eastern Settlement used resources for grand living, and authorities in Norway wanted more money. These factors combined to give them the incentive to leave what had once been a successful, thriving community.

¹⁰⁸ McGovern, 156. Small boats were easier to pull up on the ice if needed

¹⁰⁹ Roussell, 21-22. The Icelandic Annals were yearly records written in Latin.

¹¹⁰ Ingstad, 30.

¹¹¹ Seaver, *The Last Viking*, 44-45. This technique used charcoal made from fresh green wood as in L’Anse aux Meadows. Archeologists were amazed at the amount of iron in the settlement.

¹¹² Nansen, vol. 2, 305.

¹¹³ Seaver, *The Frozen Echo*, 66. He shipwrecked the next year, so the voyage ended badly

¹¹⁴ Meldgaard, “Landmandsliv,” 100.

Chapter 5

THE LAST STAGES OF THE SETTLEMENT

The two small settlements in Greenland prospered for about three hundred years, at the edge of European civilization. Unknown Icelandic scribes documented the beginning of the Greenland settlements better than their endings. The Western Settlement suddenly disappeared in the period 1342-1360, with the Eastern Settlement gradually declined at the end of the 1400s. The true beginning of the end started when the Greenlanders gave up their independence to Norway in 1261, and lost control of their shipping in 1294.

All went well in Greenland for a long time. The first sign of trouble was in 1247, when King Håkon Håkonson sent a bishop requesting that Greenland give up its independence along with the inhabitants of the Faroe Islands and Iceland so he had all Norwegian speakers under his control.¹¹⁵ As Icelandic poet Sturla Tordsson wrote in the 1200s, the king had “increased his ownership over the cold northern home under the polar star.”¹¹⁶ They were to pay taxes, follow Norwegian law, and use royal shipping. While they had loyalty to Norway, the Greenland settlers felt pressured. They debated a long time, but in 1261 they faced reality; either they submitted to the Norwegian crown, or risked losing what little shipping they had coming from Norway.¹¹⁷

¹¹⁵ H. C. Petersen, ed. *Grønlandernes historie før 1925 [The History of the Greenlanders before 1925]*, translated from Greenlandic by Birgitte Sonne (Atuakkiorfik, Greenland: Namminersornerullutik Oqartussat, 1991), 23.

¹¹⁶ Halvdan Koht, *Det Grønland vi miste - og det vi ikkje miste [The Greenland we lost, and what we did not lose]* (Kristiania: Aschehoug, 1924), from saga about Håkonsson, chapter 311. Norwegian text: “auka herredøme sitt yver den kalde heimen nord under polstjerna.”

¹¹⁷ Lindegaard, 29. This change brought the Norwegian king’s agent to live in the Eastern Settlement after 1262 to enforce laws and collect taxes, taking away the tradition power of the Norse chieftains under the lawspeaker at Brattahlid.

Initially being part of Norway provided no real disadvantage. The Greenlanders owned their own ships, and avoided a 10% tax on ships sent yearly by the royal crown. However, in 1294, the Norwegian king instituted a disastrous change of not allowing sailing in and out of Greenland without a license, to block the Hanseatic League and make private shipping more difficult. This meant that all shipping went on the King's ship, called the *knarren*, with very irregular shipping dates. This monopoly particularly harmed the Western Settlement, as the royal ship sold its merchandize to the closer and more prosperous Eastern Settlement, with nothing left for the Western Settlement.¹¹⁸

The monopoly on shipping was disastrous to Greenland's exports of goods largely caught by the Western Settlement. Illegal shipping benefitted the Eastern Settlement, as they stockpiled the trade goods caught primarily by the Western Settlement. Despite lack of shipping, Greenland exports remained in very high demand when carried out on ships that had "drifted out to Greenland," which was in sight of Iceland across the Denmark Strait.¹¹⁹ The white or grey gyrfalcons provided sport for kings, and came only from Greenland and Baffin Island. Not only were walrus tusks used for church carvings, but walrus skins provided very strong ropes for ships. Polar bear skins and live animals remained popular. The last payment "in kind" sent by the Western Settlement in 1327 for its tithes and taxes was easily converted to twenty-eight pounds of pure silver in Bergen for the Holy See.¹²⁰

¹¹⁸ Enterline, 119-20.

¹¹⁹ Keller, "Furs, Fish and Ivory," 15.

¹²⁰ Seaver, *The Last Viking*, 92. This represented Greenland's share of Peter's Pence and Crusading Tithes for the Baltic, probably some years in arrears.

The Norse were resourceful in avoiding the new shipping regulations, getting timber and bog iron from Newfoundland. However, they lacked cash for export licenses, as they had no money, and usually paid by trading in kind. Also they could not use their own ships to transport goods without risking confiscation of their ships. The Western Settlement stopped getting wheat and trade items even through the Eastern Settlement as ships stopped coming north; at the same time the Eastern Settlement built new halls and churches.¹²¹ One group took the risks; the other took the profit.

More important however was the loss of freedom and autonomy. The church kept setting new tithes for crusades in the Baltic area.¹²² They also tried to claim the small churches and surrounding land in the settlements. In both Iceland and Greenland, the largest land owners built and maintained the churches on their farms, serving also as priests when needed, and keeping part of the tithes for maintenance and priestly duties.¹²³ When the church tried to claim these churches and the surrounding lands, farmers saw the church as trying to gut the largest farms. Eventually both Greenland and Iceland objected to the new parish church system.¹²⁴ There was no benefit from religion by the end of the settlement, with no priests to perform baptisms, marriages, or burials, and no sacraments due to lack of both wheat and wine. With farmers serving as priests, pagan ways crept back into daily life, if they ever really departed.¹²⁵

¹²¹ McGovern, 203.

¹²² McGovern, 198. Small farmers paid these tithes by working for larger farmers, or making payment in products from Nordrsetur like walrus and bears. Often they had no choice but to send a family member on the hunt, as they had less margin of farm goods to give with the cooling climate.

¹²³ Seaver, *Frozen Echo*, 92-93.

¹²⁴ Seaver, *Frozen Echo*, 92. This led to armed resistance in Iceland.

¹²⁵ Seaver, *Frozen Echo*, 101.

Concurrently, there was an increasing division of social classes in Iceland, Norway, and the Eastern Settlement, with the men in charge getting a bigger share of the wealth. As mentioned, the Western Settlement kept the Viking social system, where all received a fair share in communal efforts. This put the Western Settlement at odds with the upper classes and church in the outside Nordic world.¹²⁶ Already on the margin of civilization, the Western settlement had less surplus, and no signs of real wealth in archaeological excavations other than more domestic animals and better food for the largest farms. Inhabitants in the Eastern settlement used resources for status symbols such as a crucifixion set, stained glass windows, and rich church vestments.¹²⁷

This conflict with church and king was important, but even more immediate for the demise of the Western Settlement was the cooling climate. The Norse handled the increased cold, but their cows had a tough time with colder winters and shorter summers. Before the longer winters, cows had to stay inside seven months before the longer winters, compared to five months at the Eastern Settlement; farmers already had to carry the small pre-modern cows outside at the end of the winter, as they were exhausted, and took weeks to recover their strength.¹²⁸ Climate cooling led to dead cows at the end of the winter: “the exhausted cow, after a longer winter, has given up his errand, exactly the day before the stall door was opened.”¹²⁹

¹²⁶ Keller, *Eastern Settlement Reconsidered*, 5, 34.

¹²⁷ McGovern, 196, 203. The Norse aspired to the status of lawgivers in Icelandic society, and the Eastern Settlement kept ties and arranged marriages with this class. This group also included the King’s agent and the bishop and his agents, plus family members.

¹²⁸ Meldgaard, “Landmandsliv,” 99. Farmers tied cows with a rope around their throats to pegs up the outer wall; as the cows filled the barn with manure, higher pegs held the cows in place.

¹²⁹ Meldgaard, “Landmandsliv,” 100.

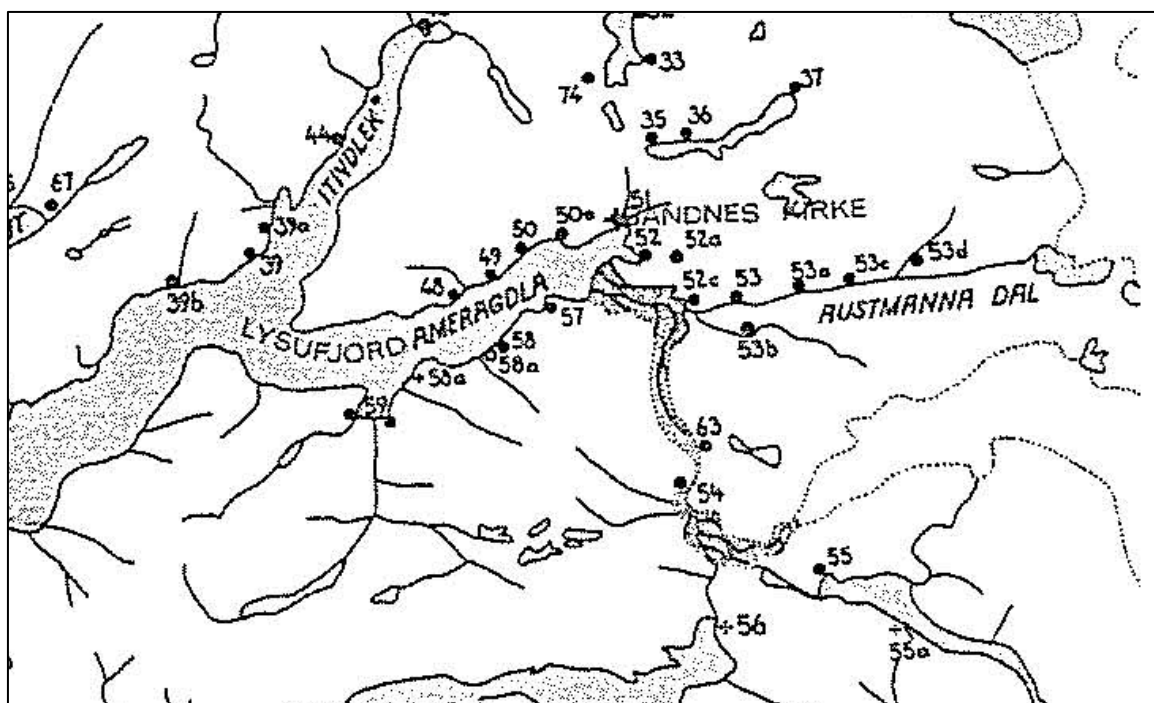


Figure 6: Center of Western Settlement, Lysufjord with Sandnes Farm¹³⁰

Three types of farms reflected the social hierarchy of the Western Settlement: large farms like Sandnes V-51 had extra animals in separate quarters; mid-sized farms (V-54) had fewer animals; and small farms (N-48) depended mainly on goats.¹³¹ The Norse were not all affected equally by the cooling climate. The larger farms had better food, and extra help to handle the cold. The smallest farms were marginal from the start, doing more hunting or helping the largest farmers.¹³² Most affected were the middle-sized farms, further away from water systems and on less fertile pasturage, like V-54 Nipaitsoq. These farms changed their building design in about 1300, and kept their animals inside, with stalls in grey areas of Figure 7 (next page).

¹³⁰ Krogh, 183. Scale 1 inch=6.95 miles, 1 cm=4.17 km.

¹³¹ McGovern, 104-06.

¹³² McGovern, 198-99. Other problems included a larvae infestation and erosion.

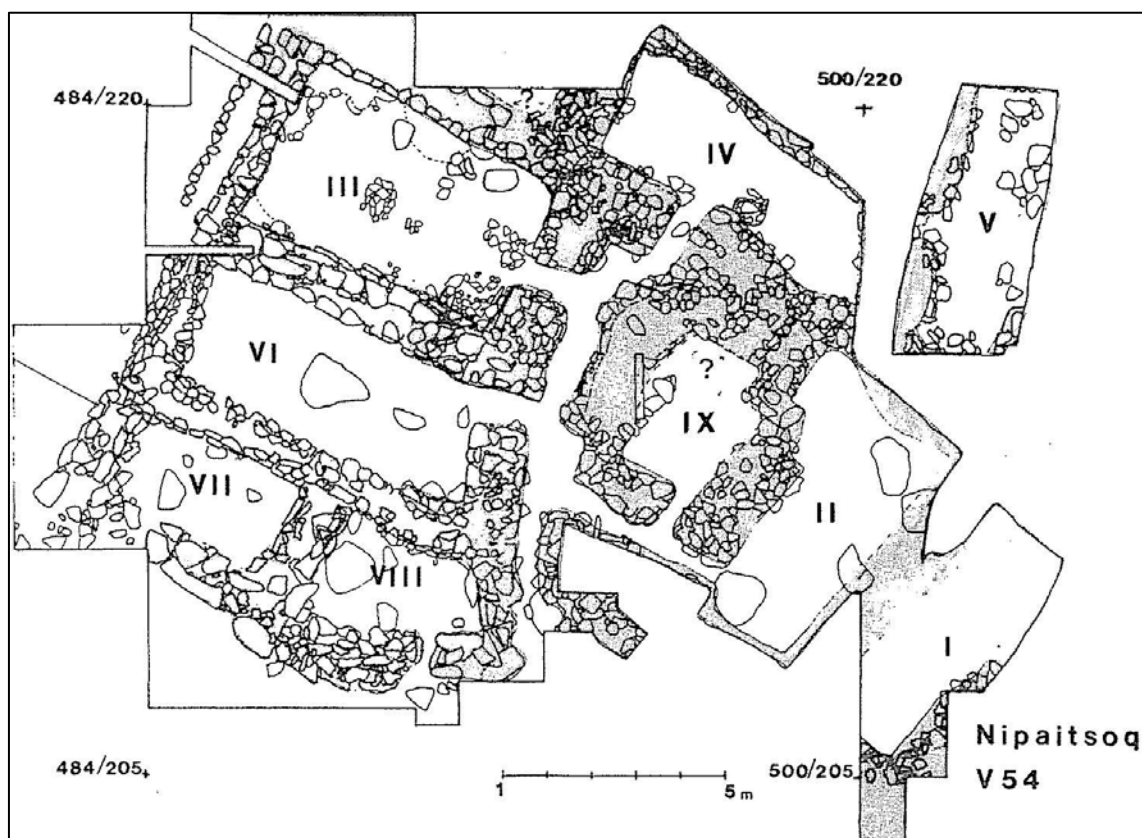


Figure 7: Farm V-54, Nipaitsoq.¹³³

The combined farm at Nipaitsoq included a work room, sleeping room and central area, central passageway, a storage room, three stalls (one for a cow), and a larger room for sheep or goats. The complex had a smithy and a sauna in separate buildings.¹³⁴ Room III was a small gathering hall with central fire, and raised benches. Room IV was a larder or storeroom for entire carcasses of meat, and other prey. Room V appeared to be for cattle, with Rooms I and II probably for goats and sheep.¹³⁵

¹³³ Andreasen, 178. Approximate size of the complex was nineteen by twenty-four meters, or 62.5 by 78.75 feet, for 4921.875 square feet.

¹³⁴ Andreasen, 179-181.

¹³⁵ McGovern, 144-47.

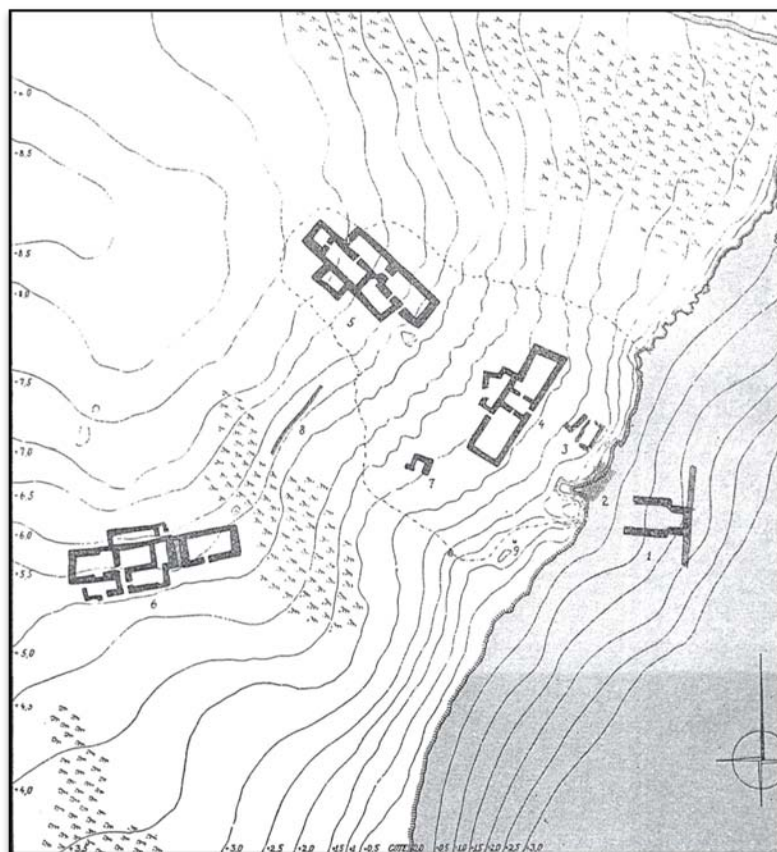


Figure 8: Sandnes Farm V-51 on Lysufjord¹³⁶

In comparison to Nipaitsoq, the largest farm Sandnes spread over a considerable area. It had the church for the area (now under water, marked #1). The living quarters were in building #4. The animals were well away from dwelling quarters in separate facilities #5 and #6 that had stalls for the animals, including the extra cows and bull for the settlement. The smithy for iron forging was in #7, while #8 was a dike.¹³⁷ It was spacious compared to Nipaitsoq and smaller farms, and less affected by the changing climate due to having more animals in better quarters, and more farm help.

¹³⁶ Krogh, 57. Scale: 1 inch = 46.875 meters or 153.8 feet.

¹³⁷ Krogh, 57. The dike was possibly for irrigation. There was no identification for #2 and #3.

An even bigger threat to the settlement came from the approaching Thule, who hunted the ring-neck seals. Again, the Thule handled the increasing cold, but the animal they depended upon did not. These seals built dens in the ice to have their pups, and needed to scratch out several breathing holes per den in thinner ice, to avoid the waiting polar bears hoping for a meal.¹³⁸ As the weather got cooler, the Thule followed the seals into Disko Bay by about 1260 (from carbon dating) where the Norse caught both walrus and polar bears. In clashes over the hunting grounds, the Norse were outnumbered from the start and pulled back to their home fjords. They had already lost the hunting areas at Baffin Island due to increasing sea ice, making sailing dangerous.¹³⁹

Archeologists found little evidence of cultural interaction between the Norse and Thule, with little exchange of words, hunting techniques, or culture.¹⁴⁰ The Norse were never particularly sensitive in dealing with natives, and took small items from the Thule winter camps at Disko Bay while the Thule were out hunting. Trading occurred probably both directly or indirectly in Greenland and the New World, depending upon the contact between the groups. In indirect trade, the owner of one pile of goods left it on the ground; if the buyer liked the transaction, he left a corresponding bundle. The first trader returned, and if happy with the transaction, took the second pile, leaving his goods for the new owner.¹⁴¹ This type of transaction took both time and trust to develop, and probably disappeared with competition over the hunting grounds.

¹³⁸ McGovern, 115-16.

¹³⁹ Meldgaard, *Nordboerne*, 87.

¹⁴⁰ Meldgaard, "Inuit-nordbo projektet," 3.

¹⁴¹ Keller, "Fur, Fish and Ivory," 4.

Further cooling brought the Thule to the Godthaab/Nuuk region by 1300, which blocked the Norse exit to the ocean. This also cut them off from collecting driftwood, harvesting beached whales, and killing harp seals, a primary source of Norse protein.¹⁴² The biggest conflict came when the Thule started hunting caribou in the fjords behind the Norse farms, as they lacked any tradition of keeping domestic animals. The final insult was their tendency to mistake the Norse domestic animals, always freely grazing in the mountains as was customary from both Iceland and Norway, for available game.¹⁴³ The hot-tempered Norse, already with their backs against the wall, probably took loss of their domestic animals as a personal affront, leading to violence.

Overall, there was an oral tradition of conflict between the groups, of mutual fear and suspicion.¹⁴⁴ The Thule were afraid of the much larger Norse, who called them *skraelinger* which translated to pygmies in Old Norse. They also learned to avoid the quick aggression of the Norse; although evenly matched in hunting ability, the Norse had the advantage of steel weapons.¹⁴⁵ In turn, the Norse were afraid when outnumbered, or backed into a corner, and quickly retreated. From oral Inuit tradition, minor skirmishes escalated into a sneak attack on a Norse farm. One Inuit legend blamed problems between the two groups on a Thule girl Navaranaq, who instigated a fight between the two groups, leading to the defeat of the Norse.¹⁴⁶

¹⁴² McGovern, 259.

¹⁴³ Gad, *Grønland*, 68. Sheep and goats still wander freely on roads in Norway and Iceland.

¹⁴⁴ Meldgaard, *Nordboerne*, 95-96.

¹⁴⁵ Henriksen, 178.

¹⁴⁶ Erngaard, 23. While legend, there was some type of skirmish between the two groups.

The most likely point of the attack was at a very small farm at V-48, called Niaquassat. In 1903, Daniel Bruun reported in an Inuit story of two human Norse craniums found with stone (Thule) arrows in their heads; while the skulls were discarded, German missionaries took the arrows a few years earlier. However there were still two unburied Thule skeletons down by the fjord, as the Thule had the same prohibition against touching the dead as many other native cultures.¹⁴⁷

While making decisions in the Western Settlement fell to the three largest farms, these decision makers looked at the communal good, and consistently chose survival, backing off while hunting at obvious signs of danger. In addition, they still had ships that held 18-20 men for hunting. Evidence shows that they withdrew suddenly, taking people and as many animals as they could as first priority. They left many personal artifacts; from the amount of valuable iron left behind, Vera Henriksen concluded that the Norse left unwillingly and suddenly.¹⁴⁸ Loose animals found in the settlement were probably either the extra animals held in reserve by the largest farms, or animals that had been up in mountain setters, and came back to the farms on their own.

Archeological evidence supported the theory that the Norse pulled out en masse in an orderly withdrawal. In leaving swiftly, they made no contact with the Eastern Settlement, Iceland, Norway, or any other civilized society. Not one single family took the safe trip to the Eastern Settlement, staying instead with their communal group. Some farms on the fringe of the settlement kept going until about 1400.¹⁴⁹

¹⁴⁷ Bruun, 8.

¹⁴⁸ Henriksen, 179-80, 183. The Norse either imported iron, or worked blooms in Labrador.

¹⁴⁹ Seaver, *Last Viking*, 59. They might have been hunting or stayed by choice.

Loss of physical security was probably the most pressing factor. They were afraid to use the hunting grounds at Disko Bay, and were essentially trapped back in four fjords with numerous Thule at the mouth of the system. This was a mountainous region, with little visibility up winding fjords. After an attack on one farm, they had no way of knowing whether this was an isolated attack, or there was a larger invasion coming. It made sense that they broke out of the fjord system while they still could.

Simultaneously, they lost what little economic security they once had. The outside world remained ignorant of the climate changes they faced, and the Thule coming down the coast.¹⁵⁰ The Norwegian king and Catholic Church squeezed them to pay more taxes and tithes, simultaneously with the loss of their hunting grounds for export products. With the church threatening to take their farm land and property, they also feared a reaction of their not paying taxes or tithes after 1327.¹⁵¹

They also had specific complaints with the Eastern Settlement. Due to lack of shipping, the Western Settlement had to depend on the Eastern Settlement, which used the fruits of the Western Settlement's labor without sending back trade goods. The hunters took the physical risks of killing large mammals; the profits of this risk went to build stone churches as foreign-born bishops initiated large building campaigns:

The later formally planned stone churches thus seem to reflect the power of a central ecclesiastical authority to divert substantial amounts of labor to the construction of structures in an alien architectural tradition that had no direct subsistence utility.¹⁵²

¹⁵⁰ McGovern, 259.

¹⁵¹ Henriksen, 144.

¹⁵² McGovern, 205. This use of labor also subverted the traditional power of the lawspeaker.

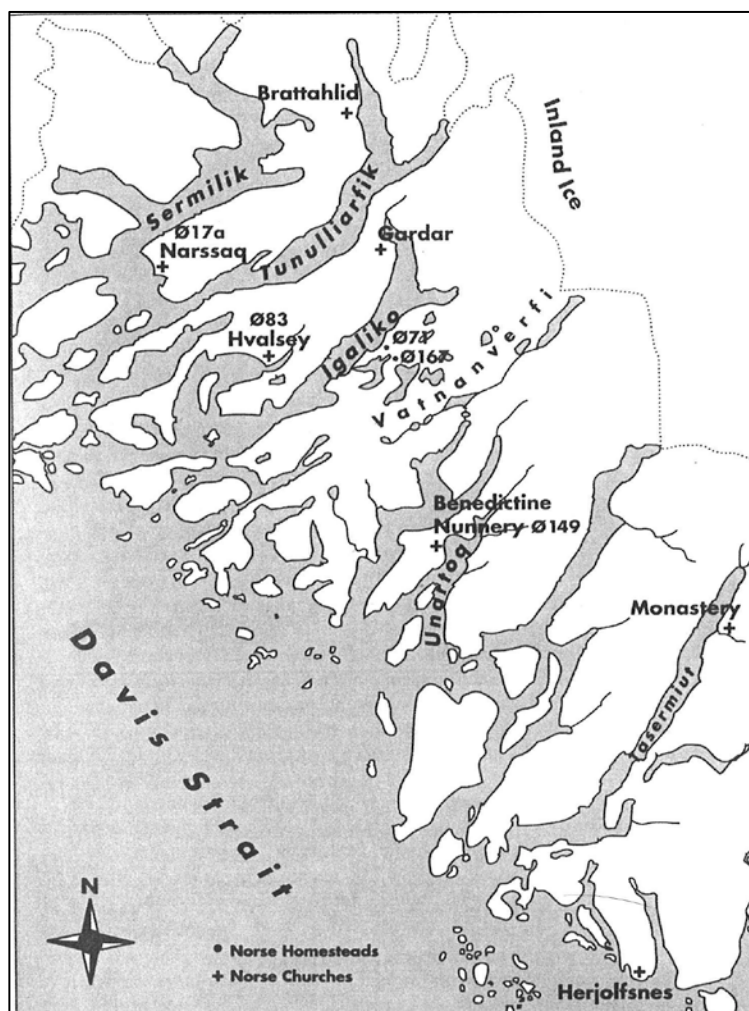


Figure 9: Map of Eastern Settlement¹⁵³

The Eastern Settlement supported a cathedral at Gardar (now Igaliko), a monastery, a Benedictine nunnery, and twelve parish churches for two hundred farms in a smaller region than the Western Settlement.¹⁵⁴ Church building consumed much of the labor force during summer months, keeping them away from communal hunting.¹⁵⁵

¹⁵³ Seaver, *The Frozen Echo*, map by David O. Seaver, 3. Scale: 1 inch = 31.25 miles.

¹⁵⁴ David Wilson, *The Vikings and Their origins: Scandinavia in the First Millennium* (London: Thames and Hudson, 1970), 81.

¹⁵⁵ McGovern, 204-05.

As mentioned, the Western Settlement stopped paying its taxes in 1327. While they lost access to their traditional hunting grounds due to the encroaching Thule, they also witnessed the extensive building at Gardar, which left more than fifty ruins of the bishop's residence, utility buildings, store houses, dikes for irrigation, large kitchen gardens, and winter protection called byres over one hundred cows.¹⁵⁶ Norse society in Greenland showed increasing stratification by about 1260, with the upper class in the Eastern Settlement consuming most of the expensive imported goods.¹⁵⁷ While the bishop's farm provided aid in bad years, this was different than the Viking mentality of making sure all inhabitants got enough to sustain life in the first place, and probably did not sit well with the Western Settlement, with its already skeptical view of religion.

Somehow news got out to the civilized world that there was rebellion in the Western Settlement. With the source unfortunately lost, there was some premonition of disaster with authorities. In August 1341, Ivar Baardsen received an appointment to investigate the settlement, and collect whatever taxes he could, with historians placing his visit between 1342 and 1349.¹⁵⁸ The *Soga om austmenn* [Saga of the Eastmen] gave the Norwegian captains sailing between Iceland and Greenland: Nikolás i Leku in 1340; Bjarni Selbyggr in 1341 and 1346, and Sigurdr Austmadr Gyridarson.¹⁵⁹ The only documented ships bringing Baardsen to Greenland sailed either in 1341 or 1346.

¹⁵⁶ Marita Engberg Ekman, *Destination Viking: Western Viking Route* (Visby, Sweden: North Sea Viking Legacy, 2001), 175-77. Sandnes Farm was quite modest compared to Gardar Cathedral Farm.

¹⁵⁷ McGovern, 200-06.

¹⁵⁸ Finn Gad, *The History of Greenland I, Earliest Times to 1700*, translated from the Danish by Ernst Dupont (London: C. Hurst, 1970), 141.

¹⁵⁹ Hallvard Magerøy, *Soga om austmenn: Nordmenn som siglde til Island og Grønland i mellomalderen* [Saga of the east men: Norwegians who sailed to Iceland and Greenland in the Middle Ages] (Oslo: Det Norske Samlaget, 1993), 124.

Baardsen had time to make the trip from Norway to Iceland and then the Eastern Settlement before winter closed in. The period of late summer and early fall was the hunting season in Greenland, with less wind and sea ice restricting travel; it was called *sensommer* [late summer] in Scandinavia, later called Indian summer in North America.

While the year Baardsson visited the Western Settlement remained unclear, he hoped to make a name for himself to gain promotion in the Catholic Church. This made the visit most probable in 1342, on a ship sailing from Norway in 1341. The other alternative was visiting the settlement in 1347 or 1348, on a ship from Norway in 1346, not consistent with quickly concluding the affair to win promotion. Unfortunately, Baardsen let a scribe record the visit, with no date of this visit to Sandnes:

In the Western Settlement stands a large church, named Stensnes [Sandnes] Church. That church was for a time the cathedral and bishop's seat. Now the Skroelings have destroyed all of the Western Settlement; there are left some horses, goats, cattle, and sheep, all feral, and no people either Christian or heathen.¹⁶⁰

Greenlandic sheep stayed outside in the winter, whereas the cows they found outside could only survive inside. Realizing the animals would not survive a winter, they slaughtered as many as they had room to carry back to the Eastern Settlement.

While rumors surfaced that the Thule had taken over the Western Settlement, Baardsen and later archeologists saw no sign of battle or bloodshed.¹⁶¹ Additionally, the Thule would have slaughtered the domestic animals for meat, as they were already doing.

¹⁶⁰ Jónsson²⁹. The term Skrelinge or more commonly Skroelinger translated from Old Norse as pygmies, denoting their short stature, and was highly derogatory. This paper will designate them as the Thule culture, the current usage.

¹⁶¹ Gad, *History of Greenland*, 141. This meant that Baardsson came to the settlement the same season as its inhabitants either died or left

Alternate theories were that the settlers hid in the mountains when they saw the church tax collector, or were out hunting, and dismayed when they returned to find their animals slaughtered. Neither of these theories made much sense. The Sandnes farm was in an open glaciated bowl without trees or any place to hide; they also lacked any visibility up the fjords. The Norse hunted primarily in male groups, with an occasional woman along to cook, but left the women, the young and the old back at home. Any movement towards the mountains was readily visible from the beach.

It made sense for the Norse to get their families and animals to safety as soon as possible. The Thule were spread out along the coast, giving a threat of attack to the heavily laden ships. Also sea ice blocked the route to the Eastern Settlement except in late summer, and this route was against the Greenland current. Sailing was easiest across Davis Strait due to the current swinging away at Godthaab toward the Cumberland Sound on Baffin Island (see map page 8), and down the coast of North America.¹⁶²

The Norse were often in the new world across Davis Strait for hunting, felling timber, smelting iron blooms, and trading with the Thule and Dorset tribes. The usual route across the strait was just north of Godthaab, and was much safer than sailing to Iceland or Norway due to less storms and sea ice. The Norse knew three areas well in the new world: Markland or Labrador, Ungava Bay going in to Hudson Bay, and the Cumberland Sound, as well as Devon and Ellesmere Islands in the High Arctic.¹⁶³

¹⁶² Bruun, 4. Icelandic sagas called this area Helluland, or land of big rocks.

¹⁶³ Meldgaard, "Fra Brattalid til Vinland," 372-380. The latter two islands were both too cold for animals or families.

In addition, the Norse were well adapted to a northern climate, loved to hunt the caribou, and probably stayed in the north. They also did better with the Inuit in the north than the more aggressive Indians to the west who killed Erik the Red's son Thorvald, from the *Icelandic Sagas*.¹⁶⁴ The Thule were peaceful on a daily basis, until their shamens excited them to a sneak attack in retaliation for Norse misbehavior.¹⁶⁵

A fire at the Skálholt Bishopric in southern Iceland destroyed many of the *Icelandic Annals* in 1630.¹⁶⁶ As bishop of Skálholt from 1630 to 1638, Gisle Oddsson reconstructed in 1637 the most important clue of what happened to the Norse:¹⁶⁷

1342 the inhabitants of Greenland of their own will abandoned the true faith and the Christian religion, having already forsaken all good ways and true virtues, and joined themselves with the people of America. Some consider too that Greenland lies closely adjacent to the western regions of the world. From this it came about that the Christians gave up their voyaging to Greenland.¹⁶⁸

Jones noted "parallel" lines in Lyskander's *Grönlandske Chronica* of 1608 as "a somewhat dubious confirmation of this annal."¹⁶⁹ While historians debated Oddsson's memory, there was ample documentation from the Canadian Arctic to support this entry that the Western Settlement left for America and abandoned civilization.

¹⁶⁴ Meldgaard, "Fra Brattalid til Vinland," 372.

¹⁶⁵ Meldgaard, "Om de gamle Nordboer," 99-100.

¹⁶⁶ Henriksen, 138. Gisle Oddsson grew up at the bishopric, and used his memory of the bishopric archives and book collection he had studied earlier as son of Bishop Odd Einarsson to rebuild the specific information. Someone obviously added the term America at a later date.

¹⁶⁷ *Grønlands Historiske Mindesmærker*, 459. Original text: "1342 Groenlandiæ incolæ a vera fide et religione christiana sponte sue defecerunt, et repudiatis omnibus honestis moribus et veris virtutibus ad Americæ populos se converterunt; existimant enim quidam Groenlandiam adeo vicinam esse occidentalibus orbis regionibus. Ac inde factum quod Christiani a Groenlandicis navigationibus abstinerent."

¹⁶⁸ Jones, 61-62. This is the most common translation of the Latin text.

¹⁶⁹ Jones, 62n.

The Norse in the Western Settlement left for a number of reasons. Staying where they were, they might perish either at the hands of the Thule or a changing climate. Their cattle suffered with the longer winters, and their domestic animals made easy targets for the Thule coming through Norse farms to hunt caribou. The settlement showed contraction of marginal farms, as the climate showed extreme fluctuations in the period of 1280-1380.¹⁷⁰ McGovern saw the settlement as going through a “cusp collapse,” a series of gradually increasing minor changes past the point where a small change triggered the dramatic and sudden ghost town that Baardsson discovered.¹⁷¹

While the climate and Thule probably precipitated their departure, the settlers had their backs against the wall with the Eastern Settlement and Norwegian authorities. They lost the means of harvesting luxury goods to pay their taxes and tithes, and saw no benefit in the organized religion and kings taking the fruits of their labor. With no desire for the restrictions or covetous lifestyle of Iceland, Norway, and the Eastern Settlement, they preferred their Viking traditions of communal living and sharing of resources. In the new world, they had the possibility of a new life, and freedom from monarchs, churches, and civilization. They had already demonstrated the ability to adapt to a new setting, with two prior moves to Iceland in 874 and Greenland in 986, both times for more freedom and less interference from authorities. While the Thule in essence gave them the immediate reason to leave quickly, they were already fed up with the situation, and had nothing to lose by leaving.

¹⁷⁰ McGovern, 258-59.

¹⁷¹ McGovern, 259-60.

Chapter 6

INTO THE NEW WORLD?

Many historians have been adamant that the Greenlanders survived in the Canadian Arctic as the bearded, red-haired, and light-eyed hybridized Inuit called Tunnit, Tournit, Tunnek, Tunit, or a term coined by Vilhjálmur Stefánsson, “Blond Eskimos.” Inuit legends in northern Labrador, Baffin Island, and the central Arctic supported the tradition that the Western Settlement went to America, even calling them “Greenlanders.” Further sightings of European-looking Inuit with full beards, red or curly brown hair, and light eyes came from explorers seeking the Northwest Passage.¹⁷²

Collected by Henry Rink in 1875, the natives of Labrador told stories to early missionaries of large individuals, called both Tunnit and Grönlaender [Greenlander]. The Tunneks or Tunnits were outnumbered, and “fled from fear of our people, who used to drill holes in their foreheads while yet alive.”¹⁷³ They reportedly left for Killinek at Cape Chudleigh, which was the northernmost tip of Labrador. They were stronger than the Inuit: “Huge blocks of stone are still to be seen which they were able to move. Some ruins of their houses are also to be found here and there in our country, chiefly upon the islands, having been built of stones, and differing from the abodes of our

¹⁷² Searchers for Sir John Franklin’s 1845 expedition did the first mapping of the Canadian Arctic.

¹⁷³ Rink, 469. Spelling usually varied between Tunnit, Tunit, Tunnek, or Tornit.

people.”¹⁷⁴ The local Inuit thought it was “incongruous” for people to live on islands.¹⁷⁵

Visiting Northern Labrador in 1922, G. M. Gathorne-Hardy also heard stories about the “Tunnit” race, said to be extinct, and of non-Inuit origin. The Tunnit were rated as non-Inuit due to their greater strength and size, and low population compared to the Inuit. The earliest missionaries to the region mixed the word “Greenlanders” with the word Tunnit.¹⁷⁶ The name was derogatory, meaning a very dirty man, as they lacked skill in dressing sealskin, leaving the smelly blubber attached.¹⁷⁷ Legend said the Tunnit came to the islands of Labrador directly from overseas, and were driven up the coast toward Baffin Island after stealing Inuit kayaks.¹⁷⁸ Addressing the London Geographical Society, Holand discounted the Tunnit being an Inuit tribe: “All along the Labrador coast, where several different Eskimo tribes existed, the Tunnit are constantly treated by tradition as something not Eskimo, but contrasted with that race.”¹⁷⁹

Franz Boas collected Inuit stories of the Tornits for the Smithsonian Institution in 1888, describing them at Cumberland Sound: “The Tornit were much taller than the Inuit and had very long legs and arms.”¹⁸⁰ The Tornit played too roughly in games of ball, hurting the Inuit. They also stole kayaks, prompting their departure after an Inuit

¹⁷⁴ Rink, 469-70.

¹⁷⁵ Rink, 479.

¹⁷⁶ Gathorne-Hardy, 162.

¹⁷⁷ Gathorne-Hardy, 162. The term was equivalent to “Hun.” Author’s comment was: “if they struck heathen Eskimo as dirty they must have been the last word in squalor.”

¹⁷⁸ Gathorne-Hardy, 166-67.

¹⁷⁹ Holand, 128.

¹⁸⁰ Boas, 226. Blear eyed could mean bleary, but could also denote a duller or lighter color.

stabbed a sleeping Tunnit in the base of his neck.¹⁸¹ Boas related a distinctive group hunting style, which also demonstrated the great strength of the Tunnit:

Their method of hunting deer was remarkable. In a deer pass, where the game could not escape, they erected a file of cairns across the valley and connected them by ropes. Some of the hunters hid behind the cairns, while others drove the deer toward them. As the animals were unable to pass the rope they fled along it, looking for an exit, and while attempting to pass a cairn were lanced by the waiting hunter, who seized the body by the hind legs and drew it behind the line.¹⁸²

Modern support came from James Robert Enterline who believed the Norse left for the High Arctic to hunt caribou as the Tunit people. Inuit legend held that the Tunit also hunted musk oxen in the central Arctic. From the range below, they were not available on the west coast of Greenland at the time of the Norse Settlements; however, they were on Ellesmere and Devon Islands, which showed signs of Norse visitation.¹⁸³ Of the Arctic animals, these beasts tasted the most similar to domestic beef, an attraction for the Tunit. As “bold bear hunters,” they were different from the Thule or earlier Dorset; these earlier groups avoided bears when they could, as did the Inuit.¹⁸⁴

¹⁸¹ Boas, 227-28. The Inuit were afraid to confront the Tornit due to their much larger size.

¹⁸² Boas, 227. The Norse built similar cairns in the hunting areas of Greenland.

¹⁸³ *National Geographic*, “Musk-Ox: *Ovibos moschatus*,” <http://animals.nationalgeographic.com/animals/mammals/musk-ox/> (accessed 11 November, 2011).

¹⁸⁴ Enterline, 130-132. The larger Norse farms preferred beef and caribou to seal and goat meat.

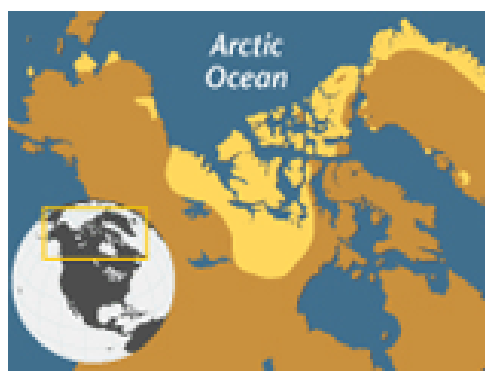


Figure 10: Modern Range of Musk Ox¹⁸⁵

An interesting point came from the Netsilik natives who sheltered Roald Amundsen on his Northwest Passage of 1903-06 for two winters at Gjøa Haven. They were on King William Island, the next island east from Stefánsson's "Blond Eskimos," and described the Tunit as loving to sail: "In contrast to the present population [as well as the previous Thule or Dorset populations], they loved the sea when it was not covered with ice."¹⁸⁶ The Inuit preferred ice on the sea for transportation with dog sleds and easy seal hunting at breathing holes, much like polar bears. A final point was that the Tunit dialect differed from that of the Central Arctic Inuit, resembling the dialect of Greenland and suggesting that the Norse learned to speak a Thule dialect similar to Inuit before leaving Greenland, perhaps while out hunting in small groups in winter.¹⁸⁷

In 1919, Vilhjálmur Stefánsson described "Blond Eskimos" living on Victoria Island in the central Canadian Arctic. Some members of this group had blue eyes, light-brown beards, rusty-red hair, and other European features. With ten or more having

¹⁸⁵ *National Geographic*, "Musk-Ox." Color of map is blue for oceans, tan for Canada and Greenland, cream for musk ox range in eastern Greenland, and high northeast and central Canadian Arctic. While a modern map, no reference to musk ox occurred in accounts of the Greenland settlements.

¹⁸⁶ Enterline, 139-40. Author's note in brackets.

¹⁸⁷ Enterline, 140. One question might be, were there Norse words remaining in the dialect?

blue eyes out of a thousand, he stated: “No full-blooded Eskimo has a right to blue eyes, as far as we know - his eyes should be as brown and his hair as black as those of the typical Chinaman.”¹⁸⁸ Stefánsson concluded: “If the reason that the Victoria Island Eskimo are European-like is that they are of European blood, then the Scandinavian colony in Greenland furnishes not only an explanation, but the only explanation.”¹⁸⁹



Figure 11: “Blond Eskimos” at Prince Albert Sound¹⁹⁰

Genetic characteristics easily divide into dominant and recessive traits.

Dominant traits include brown eyes, dark hair, non-red hair, curly hair, full head of hair,

¹⁸⁸ Stefánsson, 194.

¹⁸⁹ Stefánsson, 173, 194-95, 200. Blue eyes are a characteristic of Norwegians. In my class of 40 at Nes Gymnas in Årnes, Norway, in 1966-67, 37 of 40 students had blue eyes. I was American and of French descent, one female student was Jewish, and one male student had the looks of the Black Irish.

¹⁹⁰ Stefánsson, 194. Note facial hair, baldness, height, and length of legs as different than the Inuit. This has been a controversial theory, with discussion in the 1920s and research lately.

and widow's peak, while recessive traits include grey, green, hazel, or blue eyes, blonde, light, or red hair, straight hair, baldness, and normal hairline.¹⁹¹ Inuit have very little baldness, a recessive trait.¹⁹² They also lack facial hair, which "keeps ice and condensation from building up from the breathing," according to an Inuit source.¹⁹³



Figure 12: Inuit family, about 100 years ago.¹⁹⁴

¹⁹¹ "Dominant and Recessive Characteristics," <http://www.blinn.edu/socialscience/ldthomas/feldman/handouts/0203hand.htm> (accessed 11 November, 2011).

¹⁹² "Ethnicity and Androgenic Alopecia: Why Eskimos Don't Go Bald!" <http://www.top-hair-loss-remedy.com/androgenic-alopecia.html> (accessed 11 November, 2011).

¹⁹³ *Essay Pride*, "Inuit Eskimos," http://www.essaypride.com/essays.php?free_essay=2638350&title=Inuit-Eskimos (accessed 11 November 2011).

¹⁹⁴ Frank E. Kleinschmidt, "Photograph of Inuit Family about 100 years ago," Library of Congress Prints and Photographs. http://www.windows2universe.org/earth/polar/inuit_image_gallery.html (accessed 11 November 2011). Showing that personality traits transcend cultures, one member had no desire to be photographed (on floor to right).

The Inuit also had a distinct head shape, “narrow of skull and wide of face. . . his face is wider than his head,” with specifications accepted by the American Museum of Natural History; the head form of the “Blond Eskimos” matched persons of mixed Inuit and white lineage.¹⁹⁵ The picture above showed lack of facial hair, straight dark hair, and wideness of face in an Inuit family of the previous century. From the Inuit, “a flat face and small extremities are easier to keep warm. . . the very tough jaw comes from the very tough diet, which regularly includes raw, frozen meat or walrus hide.”¹⁹⁶

A. W. Greeley charted sightings of hybridized Inuits with European features found across the Arctic (next map). He shared the belief of Fridtjof Nansen that the Norse absorbed into the Inuit lifestyle, with some taller and with fairer complexions. He also based this on linguistic similarities of dialects from the east:

That the admixture of alien blood among the hybrid natives of Victoria Land originated in regions to the eastward seems assured from the greater homogeneity of the language and of the customs of the blond Eskimo with those of eastern tribes than with the tribal characteristics of their Inuit brethren to the west.”¹⁹⁷

¹⁹⁵ Stefánsson, 194-95.

¹⁹⁶ *Essay Pride*, “Inuit Eskimos.”

¹⁹⁷ Greeley, 1229-1238.

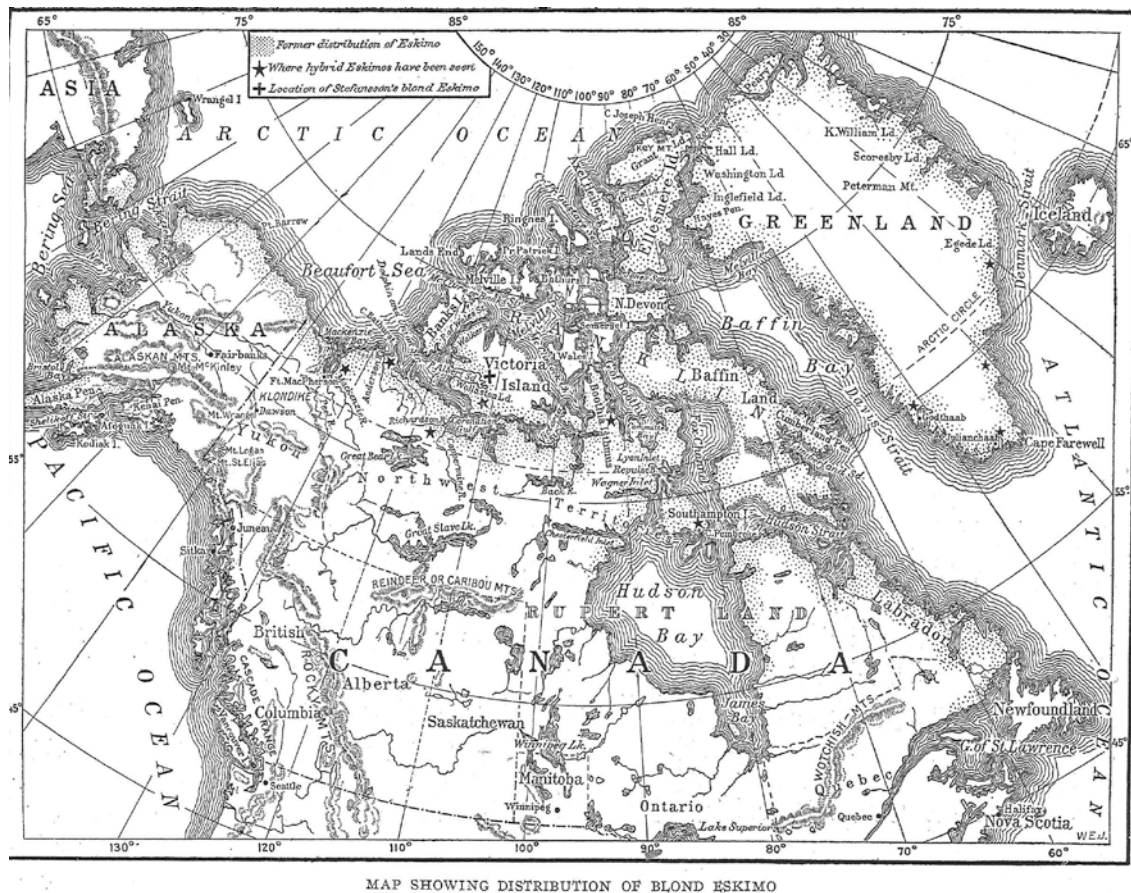


Figure 13: Map Showing Distribution of “Blond Eskimos.”¹⁹⁸

Explorers in the Davis Strait between Baffin Island and in the high Canadian Arctic reported many sightings of European-looking Inuit. Originally reported by Cesar de Rochefort, one of the earliest reports was in 1656 from Flemish Captain Nicholas Tunes at 72 degrees north on Baffin Island in the Davis Strait:

In regard to the inhabitants we saw two kinds, who lived together on the most friendly terms. Of these one kind is very tall, well built, rather fair complexion, and very swift of foot. The others were very much smaller, of olive complexion, and tolerably well proportioned, except that their legs are short and thick. The former kind delight in hunting, for which

¹⁹⁸ Greeley, 1224. See Appendix B for larger map. Stars mark sightings of “Blond Eskimos.” Victoria Island with a cross was the location of Stefánsson’s “Blond Eskimos,” and had been marked as uninhabited before Stefánsson visited the island. (Greeley, 1225).

they are suited by their agility and natural disposition, whereas the latter occupy themselves in fishing.¹⁹⁹

From the writings of A. W. Greeley came the following descriptions. Captain B. Back described an Inuit at Back River in 1833 with a very luxuriant beard. Sir John Franklin wrote of an Inuit near the mouth of the Coppermine River in 1921: “His complexion was very fresh and red, and he had a longer beard than I had ever seen on an aboriginal inhabitant of America.” Sir Edward Parry wrote of natives on the shores of Lyon Inlet in 1821: “We could scarcely believe them to be Eskimo. . . Several children had complexions nearly as fair as Europeans.” Capt. G. F. Lyon described natives near Cape Pembroke, Southampton Island in 1824: “The face of the woman was as perfect an oval as that of an European girl, with regular and even pretty features. . . The other women had the usual broad, flat faces and high cheek bones.”²⁰⁰

Given the European characteristics found by Stefánsson, William Hovgaard noted that European women as well as men were part of ethnic mixing with the Inuit.²⁰¹ This fit with genetic information about recessive genes: if one parent had the dominant gene, and the other had the recessive gene, the child had the dominant gene, but could pass on the recessive gene to offspring. If the recessive gene appeared, both parents carried the recessive gene, although they might show the dominant gene themselves.²⁰²

¹⁹⁹ Greeley, 1229. While Greeley inserted Greenland in the text, Stefánsson did not, and Holand gave the reference as Baffin Island, the far more logical choice between Baffin Island and Greenland.

²⁰⁰ Greeley, 1229-30. The girl’s mother was with her and had the same appearance.

²⁰¹ Hovgaard, 46-48, 50.

²⁰² *JRank Articles*, “Genetics - Dominant and Recessive Traits,” <http://science.jrank.org/pages/2988/Genetics-Dominant-recessive-traits.html> (accessed 11 November, 2011). As an example, my dark haired, dark-eyed brother and sister-in-law produced two children with red hair and blue eyes due to a red-headed, blue-eyed maternal grandfather, and a blond-haired blue eyed paternal grandmother.

In conclusion, extensive evidence suggested that the Western Settlement went into the Canadian Arctic. From Inuit legend and European sightings, the settlers probably went to Labrador, then Baffin Island, and finally to an uninhabited area of the Canadian Arctic at Victoria Island. Modern knowledge of genetics suggested that the red-haired and light-eyed hybridized Inuit called Tunnit, Tournit, Tunnek, Tunit, or “Blond Eskimos” had recessive European traits from both parents. Facial hair in full beards and baldness were also non-Inuit characteristics. The dialect and customs of this hybridized Inuit came from eastern regions, not the central Arctic where they settled to hunt musk ox, and suggested that the newcomers learned the dialect before leaving Greenland. Finally, early missionaries heard the term “Greenlanders” freely mixed with the derogatory term about the new tribe that could not clean sealskin properly. The evidence clearly supported the Western Settlement as moving throughout the Canadian Arctic after leaving Greenland.

Chapter 7

CONCLUSION

While the Western Settlement was initially prosperous and free from outside restrictions, these factors disappeared with a cooling climate, competition with the Thule, and restrictions from the Norwegian monarchy and Catholic Church. The Norse eventually saw the handwriting on the wall, and evacuated their settlement while they still had the boats and physical strength to do so.

Physically the Norse faced risks to their survival and prosperity. Longer winters were harder on the slowly-dying smaller Norse cows. More sea ice made breathing holes difficult for the ring-neck seal, which the Thule followed down the coast. Peaceful interactions between the Thule and Norse disappeared in competition for hunting grounds, particularly in the slaughter of Norse domestic animals by the Thule. Archeologists found a deadly skirmish at one farm, which prompted the Norse to break out of their bottle-necked fjord system before another attack from the Thule.

Economically, the Norse faced equally important conflicts. Restrictions on shipping from the Norwegian crown diminished their ability to ship trade goods, except to the Eastern Settlement, which used the profit to support an extensive ecclesiastical building program, at odds with Viking values. The Roman Catholic Church wanted the best farmland and ownership of privately-built churches. The Norse paid their last of increasing taxes and tithes in 1327, with no priests, no sacraments, and no desire to support a system that ignored them. They gave more than they got, and left.

Leaving Greenland meant the third move by the Norse away from civilization to a western new world in less than 500 years. In the 870s, they left Norway for Iceland, fleeing the violence of a new king. Icelanders never voted for another king, and remain the world's oldest democracy. In 986, Erik the Red led twenty-five ships to Greenland, seeking new land for farms, but also freedom from the blood feuds of Iceland. Finally, in the 1340s, the Western Settlement left civilization for the new world, never to return or be heard from again. They had a communal system and rapidly mounted a full scale evacuation of the core of the settlement, taking the fastest, safest sailing route across Davis Strait. The Eastern Settlement was part of the problem, and they did not notify them of their departure, or where they were going. Inuit legends placed them first in Labrador, then north on Baffin Island, and finally inland to the central High Arctic, where they either learned to behave themselves or picked up the social skills to intermingle in an Inuit culture. The reddish beards and light-colored eyes in the north were a sign of non-native blood long before European explorers entered the region.

In summary, the Norse probably left the Christian world according to the note rebuilt by Bishop Gisle Oddsson, traveling to the New World. His date of 1342 made historical sense based on sailing dates from Norway. Feeling threatened both physically by the Thule and climate change, and economically by the Norwegian crown, the Roman Catholic Church, and the highly Europeanized Eastern Settlement, the Norse in the Western Settlement voluntarily left en masse for the new world, probably in 1342.

APPENDIX A

Epilogue: Losing and Finding Greenland

The last official contact with the Greenland settlements was a wedding at Hvalsøfjord Church in the Eastern Settlement on September 16, 1408, attended by both Greenlanders and Icelanders. While the last recorded ship left Greenland in 1410, the Eastern Settlement probably survived until the end of the 1400s.²⁰³ However, Norwegian kings had already abandoned the Greenland colonies, with the last royal ship (nicknamed the “knarren”) sinking in 1369. Norway could not feed itself due to bad harvests and climate cooling before the Black Death of 1349 killed about half its population.²⁰⁴ Monastic problems led to the Kalmar Union in 1397 joining Norway, Denmark, and Sweden. While Norway slowly lost interest in the colonies due to its own problems from climate cooling and the Black Death, Danish monarch dominating this union had no interest in Greenland and other Atlantic islands from the start, focusing instead on the Baltic region and Germany.²⁰⁵ In 1393 and 1428, pirates destroyed Bergen, with a bloodbath of seamen erasing memory of the sailing routes to the Greenland colonies.²⁰⁶ In 1379, the Thule attacked the Eastern Settlement, killing 18 people, and carrying off two boys into slavery.²⁰⁷

²⁰³ Poul Nørlund, *De Gamle Nordbobygde ved Verdens Ende: Skrildringer fra Grønlands Middelalder* [*The Old Norse Colonies at the End of the World: Stories from Greenland's Middle Ages*] (København: Udvalget for Folkeoplysning Fremme, 1934), 133. Another source says September 14th.

²⁰⁴ Nansen, 98-99. Rates varied from one third to two thirds of the population dead, with Bergen crushed by “special virulence.”

²⁰⁵ Anthony Tuck, “Some Evidence for Anglo-Scandinavian Relations at the End of the Fourteenth Century,” *Medieval Scandinavia* 5, 1972, 75-76.

²⁰⁶ Ingstad, 99, keep looking for the better reference.

²⁰⁷ Gad, *Grønland*, 72.

While many thought to assist Greenland, help did not arrive. Pope Nicolaus V asked bishops nearest to Greenland to help the settlers in 1448, citing problems with pirates taking away colonists from the Eastern settlement.²⁰⁸ A Danish-Norwegian State Expedition of 1472-73 skipped a visit to the Norse settlements, helping King Alfonso V of Portugal look for new land to the west.²⁰⁹ In 1492, Pope Alexander VI optimistically appointed Mads Knudsen as the Bishop of Gardar at the end of the world in Greenland.²¹⁰ Archbishop Erik Walchendorff assembled records about Greenland during his term at Nidaros Cathedral in Trondheim (1510-1521), and was the first to place both the Eastern and Western Settlement on the east coast of Greenland, nearest to Iceland.²¹¹

In 1585, Englishman John Davis sailed into Gilbert Sound near Godthaabsfjorden (near the Western Settlement) as the first official European visit in modern times. Fishermen or whalers from other nations had been there before him, as he found many bodies buried on an island in 1586.²¹² Frederik II thought of sending a ship in 1568 to Greenland, but ended up in a war with Sweden instead. Kristian IV sent a total of three expeditions to the Greenlandic West Coast in 1605-07, without finding the settlements.²¹³

²⁰⁸ Lindegaard, 121.

²⁰⁹ Nørlund, *De Gamle Nordbobygde*, 135.

²¹⁰ Lindegaard, 33. The island lacked bread, wine, and oil, and lived on dried fish and milk. Ships could only sail there in August according to this account.

²¹¹ Graah, 7; Fyllingsnes, 37. Alternate spelling Valkendorf.

²¹² Nørlund, *De Gamle Nordbobygde*, 145. Covered only with sealskin with a cross on top, these were not the Norse but European fishermen of unknown nationality.

²¹³ Nørlund, *De Gamle Nordbobygde*, 145. Many other expeditions seeking the Northwest Passage noted European-looking Inuits, but failed to find the colonies in Greenland.

The Western Settlement remained lost until 1721 when Norwegian missionary Hans Egede founded Godthaab (now Nuuk). While hoping to find the Norse settlers and bring them back into the Christian faith, he saw instead the ruins of the Western Settlement that the Inuit showed him.²¹⁴ In 1723, he wrote of the badly collapsed church ruin at Ujaragssuit near Godthaab: “I have since asked the savages if they had destroyed this stone building, but they answered that the Norwegians themselves did it when they left the country; that is all they know about this.” Deeply disappointed about never finding the Eastern Settlement, he sailed unknowingly by these ruins in 1723.²¹⁵ In 1729, the newly appointed Governor of Greenland, Major Claus Enevold Paars, tried unsuccessfully to take an expedition over the icecap from Austmannadalen to find the settlers on the east coast.²¹⁶

When repeated expeditions failed to reach the ice-bound eastern coast of Greenland, H. P. von Eggers looked at medieval writings in 1792, and concluded that the Eastern Settlement was at Julianehaab on the west coast.²¹⁷ W. A. Graah dug up the Hvalsey Church (visited earlier by Egede), and verified the west coast location of the Eastern Settlement in 1828.²¹⁸ In 1884, when explorers thoroughly explored Greenland’s East Coast, the dream of finding live settlers from the Norse colonies finally died.

²¹⁴ Nørlund, *De Gamle Nordbobygde*, 145-46. Egede was successful as a missionary, earning the title as the “Apostle of the Inuits.”

²¹⁵ Poul Nørlund, *Viking Settlers in Greenland and their descendants during Five Hundred Years* (New York: Krause Reprint Co., 1971, Reprint, original Copenhagen: G. E. Gads Forlag, 1936), 139.

²¹⁶ Nørlund, *De Gamle Nordbobygde*, 145-46. Paars left from the bottom of the Ameralikfjord within sight of the largest Sandnes farm of the Western Settlement.

²¹⁷ Nørlund, *De Gamle Nordbobygde*, 147.

²¹⁸ Seaver, *The Last Vikings*, 200.

APPENDIX B

Pictures from Sandnes Farm, Western Settlement



Figure 14: Sandnes Farm from boat, August 20, 2011



Figure 15: From beach, looking back up fjord



Figure 16: Norse excavations at Sandnes Farm, church under water



Figure 17: Caribou horns, hunting in mountains

Best caribou hunting in Greenland is in mountains behind Western Settlement. Many hunters have abandoned horns here and at the beach. Excavation junk is in foreground.



Figure 18: Cairn, tall grass, river in background



Figure 19: Across fjord, Austmannadal to left

The grass was tall, waving in the wind. It was a beautiful peaceful setting, with mild weather on August 20, 2011. Norse used cairns for directional markers and for hunting.

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