This is the print version of the Skeptical Science article 'Greenland was green', which can be found at http://sks.to/green.

# Greenland used to be green

**What The Science Says:**
The Greenland ice sheet has existed for at least 400,000 years. There may have been regions of Greenland that were 'greener' than today but this was not a global phenomenon.

**Climate Myth: Greenland was green**
"CfA's Sallie Baliunas [...] refers to the medieval Viking sagas as examples of unusual warming around 1003 A.D. 'The Vikings established colonies in Greenland at the beginning of the second millennium, but they died out several hundred years later when the climate turned colder,' she notes." (William Cromie)

This argument is based on the idea that as climate has changed naturally before, current climate change must be natural also. The obvious flaw in this argument is that the main driver of climate during the Medieval Warm Period (eg - solar variations) cannot be causing global warming now. More on the "Climate's changed before" argument...

## Did Greenland used to be green?

The Greenland ice sheet is at least 400,000 to 800,000 years old. Certainly it was alive and well when the island was named around 1000 years ago. So where did the Green in Greenland come from? According to Wikipedia, legend has it was good marketing on the part of Erik the Red who figured it would attract more settlers (if he was more vain, it may have been called Redland). Or perhaps its a derivation of Engronelant or Gruntland. The main point is while the ice sheet has always been there, Greenland probably was somewhat warmer during the Medieval Period and part of Greenland was green. So once again, I refer you to the Climate's changed before argument.

## Ancient Greenland DNA

I recommend reading what the authors are actually saying about their own study. The study connects past warming to natural variations in Earth's orbit—obliquity, or how tilted the planet is in relation to the sun. Author Martin Sharp points out "One could argue that this shows that natural forcing could account for the current warm conditions, but the current orbital configuration does not support this, even when other natural forcings are taken into account." In other words, their study "really has nothing to say about the mechanisms driving the current warming."

According to author Eske Willerslev, the Greenland ice shelf "has not contributed to global sea level rise during the last interglacial. Importantly, it does not mean that we should not be worried about future global warming as the sea level rise of five to six meters during the last interglacial must have come from somewhere."

Finally, Martin Sharp warns the study "does not prove the current global warming trend is not human induced". If anything, "we may be heading for even bigger temperature increases than we previously thought".

Intermediate rebuttal written by John Cook

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**Update July 2015**:

Here is a related lecture-video from Denial101x - Making Sense of Climate Science Denial

[*see video at* ***this link***.]

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