

## Investigation 7: Exploring Climate Change

### This investigation will help you to:

- Climate Proxies
- Ice Cores
- Past Glaciations
- Causes of Climate Change

To learn more about climate proxies, visit the following web sites:

#### Proxy Climatic Data, **NOAA Paleoclimatology Program**

This site provides links for several different climate proxies including: Historical Data, Corals, Fossil Pollen, Tree Rings, Ice Cores, Ocean & Lake Sediments

Summary for Policymakers: The Science of Climate Change, **Intergovernmental Panel on Climate Change (United Nations)**

Review a list of facts and statistics about Greenhouse gases, anthropogenic aerosols, climate change over the past century, the evidence for human influence on global climate, future climate change, and remaining uncertainties.

Fossil Groups: Spores and Pollen, **USGS**

"By analyzing pollen from well-dated sediment cores collected at critical sites, it is possible to obtain high-resolution records of vegetation change with decadal-scale resolution and to document community changes over the last few centuries and millennia."

Photo Gallery of Trees and Tree Rings, **University of Tennessee**

Dendrochronology. Questions and answers on tree-ring research.

Classic References in Dendrochronology, **University of Tennessee**

Dendrochronology.

Dendrochronology, **Leonard Miller**

Provides information on the principle and the importance of dendrochronology.

To learn more about ice cores, visit the following web sites:

#### Why Study Ice Cores, **National Ice Core Laboratory (NICL)**

This site includes a brief description about why ice cores are an important source of information.

How is it done?, **National Ice Core Laboratory (NICL)**

This section of the National Ice Core Laboratory web site takes you step by step through the process of taking, obtaining, studying an ice core.

Warnings from the Ice, **NOVA Online**

Learn how ice cores can give evidence for past weather events and see an ice core timeline.

To learn more about past glaciations, visit the following web sites:

#### All About Glaciers, **National Snow and Ice Data Center**

This site includes four major sections:

1. data and science,

2. general information,
3. glacier news,
4. and the glacier story.

#### Ice Ages in New England, **UMASS**

This page provides some general description as well as photos about the last glaciation of New England.

To learn more about causes of climate change, visit the following web sites:

#### Climate Change Indicators in the United States, **EPA**

This fact sheet explains how human activity may be affecting the climate

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