Climate Change Education Resources to Help You Bring the Climate Change Issue Home

Presented by: Vicki Arthur
U.S. Forest Service
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Poll Question

- Have you used the US Forest Service website or resources in your teaching?
  - ✔ YES
  - ✗ NO
U.S. Global Change Research Program
Northeast annual average temperature has increased by 2°F since 1970, with winter temperatures rising twice this much. Warming has resulted in many other climate-related changes including more frequent very hot days, a longer growing season, an increase in heavy downpours, less winter precipitation falling as snow and more as rain, reduced snowpack, earlier break-up of winter ice on lakes and rivers, earlier spring snowmelt resulting in earlier peak river flows, rising sea surface temperatures, and rising sea level. These trends are projected to continue, with more dramatic changes under higher emissions scenarios compared to lower emissions scenarios. Some of the extensive climate-related changes projected for the region could significantly alter the region's economy, landscape, character, and quality of life.

A note on the emissions scenarios

None of the emissions scenarios used in this report assume any policies specifically designed to address climate change. All, including the lower emissions scenario, assume increases in heat-trapping gas emissions for at least the next few decades, though at different rates.

Key Issues

Extreme heat and declining air quality are likely to pose increasing problems for human health, especially in urban areas.

By late this century under higher emissions scenarios, hot summer conditions would arrive three weeks earlier and last three weeks longer into fall. Cities that currently experience just a few days above 100°F each summer would average 20 such days.
National Academies of Science

national-academies.org

www.nas.edu/climatechange
Let’s Pause for Question and/or Comments
http://www.nrs.fs.fed.us/atlas/
Welcome to the Eastern Forest Environmental Threat Assessment Center!

Eastern forests are vulnerable to stresses from insects and disease, wildland loss, invasive species, uncharacteristic fire, and climate change. As new threats emerge and old threats resurface, the Eastern Forest Environmental Threat Assessment Center (EFETAC) is an interdisciplinary resource that is actively developing new technology and tools to anticipate and respond to emerging eastern forest threats. Center researchers work with other scientists nationally as well as with a variety of Federal, State, and local government agencies, universities, and non-governmental partners to address these threats. More...

What's New
EFETAC is co-hosting the 42nd Air Pollution Workshop to be held in Asheville, NC, April 12-14. Read the news release here.

An EFETAC scientist and...
Let’s Pause for Question and/or Comments
Western Wildland Environmental Threat Center:

http://www.fs.fed.us/wwetac
Carbon, Oxygen, Water and Shade: Putting a Price on the Benefits of Your School Yard Trees

Vicki Arthur
David V. Bloniarz
U.S. Forest Service
i-Tree: Demonstrating That Trees Pay Us Back!

In its lifetime, this tree has "paid us back" an estimated $1,500.
National Tree Benefit Calculator

Trees in urban areas provide a number of important benefits. They help to clean the air, curb stormwater runoff, raise property values, sequester carbon, and reduce energy costs.

You have chosen:
- Zip Code: 20250
- City: WASHINGTON, DC
- Climate Zone: South

Enter information about a street-side tree and learn about the benefits it provides. Street-side trees are typically located in front yards, medians, parkways, planting strips or other common planting areas adjacent to streets.
Natural Inquirer
Forest Service's Science Education Journal

www.naturalinquirer.org
Climate Change Education Collection

Climate Change – It’s a Gas! – Vol. 1 No. 1
It’s a Gas explores the exchange of gases between the soil and atmosphere in tropical forests. [go to issue]

Climate Change – Beetles Are Supercool! – Vol. 1 No. 2
Beetles Are Supercool examines the life cycle of the mountain pine beetle and how climate change would influence this life cycle. [Go to Issue]

Climate Change – Balancing Act – Vol. 1 No. 3
Balancing Act explores the relationship between urban trees and the carbon cycle. [Go to Issue]

Climate Change – Where in the World is Carbon Dioxide – Vol. 1 No. 4
Where in the World is Carbon Dioxide explores how rising levels of carbon dioxide could impact United States forest. [Go to Issue]

Worming Their Way In (Monograph) – Vol. 1 No. 2
The second edition monograph explores the effects of nonnative earthworms on the environment. [Go to Issue]
Let’s Pause for Question and/or Comments
GreenSchools!
www.plt.org
Side Event for the United Nations Copenhagen Climate Change Conference

A video conference will be held between students at Forest Service headquarters in Washington, DC, with students in Copenhagen, Denmark.

The event will highlight two new climate change education resources: "The Climate Change Wildlife and Wildlands Toolkit" and the "Green Schools!" program.

Date: December 10th
Time: 10:15-11:45 AM
Where: Yates Bldg., 2nd Floor Training Room
Join the adventure!

Spring 2010 through Spring 2011
FREE
Grades 4-8

Register online at http://pollinatorlive.pwnet.org

Pollinator LIVE
a distance learning adventure
Thanks!
Thank you to the sponsor of tonight's Web Seminar:
http://learningcenter.nsta.org
National Science Teachers Association

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