

Jigsaw

*Advancing
Student-Active Learning in
Ecology Education*



ECOLOGICAL SOCIETY OF AMERICA
esa

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Photo from EcoEdDL: [Sheep graze on a Ridge at Sunset In Front of the Qilian Mountain Range, an area susceptible to climate change](#) by Julia A. Klein, Colorado State University

Special Feature: Climate Change Impacts and Applications

What's new in EcoEdDL

Investigating the footprint of climate change on phenology and ecological interactions in north-central North America

Kellen M. Calinger, The Ohio State University

This exercise just published by TIEE is designed to give students experience working with large datasets and to allow them to use real ecological data to evaluate long-term temperature change and its impacts on flowering phenology, pollinator emergence and arrival phenology, and emergent trophic mismatches.

Announcements

2nd Life Discovery – Doing Science Education Conference

Registration is open! Space is still available for the Education Share Fair Roundtables! San José State University, October 3-4, 2014

Discover innovative approaches to instruction and assessment that are suitable, scalable, and adaptable to secondary and post-secondary levels of education, aligning with the objectives of both the K12 Next Generation Science Standards and the Vision and Change for Undergraduate Biology Education. This event is co-organized by the Life Discovery Partners: ESA, BSA, SSE and SEB.

Call for Proposals for Resources for Ecology Education Fair and Share (REEFS) Special Session at ESA Annual Meeting, Sacramento, CA

Attending the 2014 ESA Annual Meeting? Whether you have a tried and tested lab, field or classroom activity or a brand new teaching idea, we invite you to present your ideas to engage undergraduate students using student-active methods. We will provide information on digital publishing options during the session. [Sign up](#) to share your ecology education resource by **June 27, 2014**. Questions? Contact: Carolyn Thomas, Education Section Chair, cthomas@ferrum.edu.

Upcoming Events:

Register for CUR Conference 2014

June 28- July 1, 2014 CUR, the Council on Undergraduate Research, is hosting its 16th National Conference, "Creating the Citizens of Tomorrow: Undergraduate Research for All," in Washington DC.

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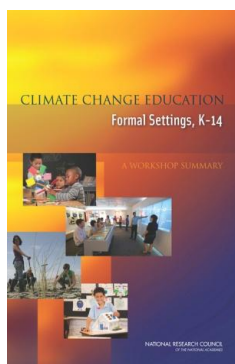
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Reports



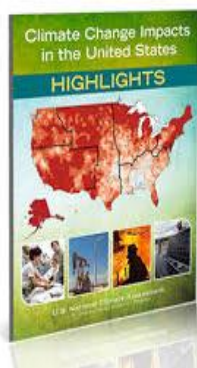
Climate Change 2014: Impacts, Adaptation, and Vulnerability

The Intergovernmental Panel on Climate Change Final Report considers the vulnerability and exposure of human and natural systems, the observed impacts and future risks of climate change, and the potential for and limits to adaptation. The chapters of the report assess risks and opportunities for societies, economies, and ecosystems around the world.



Climate Change Education in Formal Settings, K-14

This report addresses the importance of formal and informal education in supporting the public's understanding of those challenges climate change will bring, and in preparing current and future generations to act to limit the magnitude of climate change and respond to those challenges.



Teaching Climate Using the National Climate Assessment

The Third National Climate Assessment is available to download and can be explored interactively through the newly redeployed, mobile-compatible site. Every piece of the report is shareable, including graphics, key messages, regional highlights, full chapters, and more. The new site also features topical call-outs, resources, and news about global change and related Federal research and engagement efforts.

Resources



Special Feature: Applied Ecology – Climate Change

What Does Agriculture have to do with Climate Change

Education Resource Partners



ESA Education and Diversity
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By Brook J. Wilke, Michigan State University



In this activity, students investigate three sources of greenhouse gas emissions from agriculture, and how different cropping methods, including no-till, organic and perennialization, affect global warming potential. In addition, students will discuss potential trade-offs that limit the broad application of these practices and identify tactics that may aid in the reduction of global warming potential from agriculture.

Investigating Climate Change Evidence

By Cornelia Harris, Cary Institute of Ecosystem Studies & Marist College

This activity encourages students, in groups, to become experts on different types of evidence as a means of understanding climate change. Each group focuses on a topic, highlights at least one data set within that topic, and researches the data collection process along with the potential consequences of the evidence. Students are asked to critique the evidence they investigate, using a prepared checklist, and to share the results of their research with their classmates. Finally, students evaluate the evidence behind a skeptic's claim, and discuss the knowns and unknowns about climate change.

Want more climate change education resources? [Click here!](#)

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