

Jigsaw

Advancing
Student-Active Learning in
Ecology Education



ECOLOGICAL SOCIETY OF AMERICA
esa

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Photo Credit from EcoEdDL: [Recruitment of tree species visible in a canopy gap in a southern Appalachian forest](#) by Ines Ibanez.

Special Feature: Forests

Announcements

Call for Peer Reviewers

EcoEd Digital Library is expanding its database of peer reviewers. Peer reviewers are essential for the continued success of the EcoEd Digital Library.

Interested in Teaching with Big Data?



Enhancing Data Use for Inquiry-Based Biology Education is a LinkedIn group to share resources toward data literacy. Join to be part of this conversation about What departments have data literacy courses and modules as part of core curriculum? Who is teaching courses that incorporates data literacy concepts?

ESA's Office of Education and Diversity is now on Facebook!



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Articles & Reports



Discipline-Based Education Research:

Understanding and Improving Learning in Undergraduate Science and Engineering (National Academy of Sciences, 2012)

Upcoming Events

[Association of College and University Biology Educators](#)

[Annual Conference](#)

October 18–19, 2013 | Indianapolis, IN

[Transforming STEM Education: Inquiry, Innovation, Inclusion, and Evidence](#)

October 31–November 2, 2013 | San Diego, California

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Resources



Special Feature: Forests

Issues In Ecology: A synthesis of the Science on Forests and Carbon for U.S. Forests

This report explains carbon processes and examines the science behind mechanisms proposed for increasing the amount of carbon stored in forests and using wood to offset fossil fuel use. We also examine the tradeoffs, costs, and benefits associated with each mechanism and explain how forest carbon is measured.

Forest Ecosystem Responses to Chronic Nitrogen Additions

In this activity, students work with data collected during 15 years as part of a long-term research project at Harvard Forest. Students analyze the data to address the question, "How have stands of pine and hardwood forest responded to long-term nitrogen fertilization?" Students address the question using data on several ecosystem characteristics and processes: net primary productivity, tree photosynthetic capacity, soil respiration, and soil microbial biomass.

Hubbard Brook Streamflow Response to Deforestation

This teaching activity explores what the short- and long-term effects of a whole-watershed deforestation experiment are on streamflow. Students can use an MS Excel file or hard copy of data to graph short- and long-term streamflow response to a whole-watershed manipulation. Students can then compare results to baseline data, draw conclusions about hypotheses, and consider implications of long-term research.

[For more FOREST related resources in EcoEd Digital Library, click here](#)

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