

Jigsaw

Advancing
Student-Active Learning in
Ecology Education



ECOLOGICAL SOCIETY OF AMERICA
esa

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Photo Credit from EcoEdDL: [A misty rain forest canopy in central Amazonia](#) by William Lawrence.

Special Feature: Rainforests

What's New in EcoEdDL

Roots as foragers

by Stanley A. Rice

In this project, students can experience plants as responsive rather than passive organisms. Roots forage through heterogeneous media and proliferate in portions of the soil that have abundant nutrients. Students can see and measure this growth. Students also get to address issues of experimental design such as the sequence effect.

Nesting trends (2011) of loggerhead sea turtles (*Caretta caretta*) in South Carolina

by Arturo Herrera

This graph depicts the 2011 nesting trends of loggerhead sea turtles (*Caretta caretta*) in South Carolina. Also included is a 2009 report from the South Carolina Department of Natural Resources. These resources belong to a larger resource folder concerning loggerhead sea turtles.

Announcements

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Upcoming Events

Ecological Society of America Annual Conference

August 4–9, 2013 | Minneapolis, MN

Association of College and University Biology Educators Annual Conference

October 18–19, 2013 | Indianapolis, IN

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We have put together a document listing all program events at the ESA annual meeting related to education, outreach, and communications. <http://www.esa.org/esa/wp-content/uploads/2013/03/2013-ESA-Education-Sessions.pdf>.

Resources and Articles

The PULSE Vision & Change Rubrics articulate fundamental criteria for evaluating the level of adoption of the principles of Vision and Change in life science departments. The rubrics can provide a structure for departmental reflection and discussion regarding topics relevant to program transformation. Ultimately, the rubrics are intended to serve as the basis for a tiered certification program for undergraduate life science departments that have adopted some or all of the principles outlined in the Vision & Change report and a blueprint for change in departments that have not yet adopted those principles.

Please go to <http://www.pulsecommunity.org/> to download version 1.0 of the rubrics.

Resources

Special Feature: Rainforests



Photo gallery of Olympic National Park

Most people don't know that rainforests exist outside the tropics. Introduce the concept of temperate rain forests to your students with this gallery of beautiful photographs of Olympic National Park in Washington State.



Rain Forest Ecology

A collection of lecture outlines and articles on rainforests, with a focus on conservation biology.

Beverly Brown
Amy L. Chang
Eve Emshwiller
David Kirschtel
Ken Klemow
Gerd Kortemeyer
Thomas R. Meagher

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Rainforest resources on EcoEdDL

[Rainforest carbon cycling and biodiversity: A simulation model learning tool](#)

This modeling activity simulates how atmospheric CO₂ concentrations, which influence global climate, increase with deforestation and decrease during reforestation. Students gain hands-on experience in exploring carbon cycling, and linkages with nutrient cycling and food chains. The quantitative aspects of this activity promote integration of mathematical skills with scientific concepts.



[Degradation of a tropical stream](#)

This resource group contains a series of photographs showing the widening of a road that then caused an increase in the sediment load in the streams below the road. The photographs show the road and the surrounding tropical rainforest, an example of a stream with increased sediment load, and before and after photographs of pools along the stream (with and without reference points).

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