



Jigsaw – A technique for Student-Active Learning
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Building Collaborative Communities for Teaching

by Teresa Mourad¹

Welcome to the first issue of *Jigsaw* – ESA's Education newsletter. You have all probably heard of the [Jigsaw technique](#) – a pedagogical strategy in a student-active classroom. *Jigsaw*, as a symbol of the active learning pedagogies that ESA is committed to will promote ideas of how to engage your students in the learning process. It also speaks of integrating myriad puzzle pieces into a whole – tools, research and communities – for an exciting adventure in ecology education.

ESA has won an NSF award to promote *Digital Resource Discovery and Dynamic Learning Communities for a Changing Biology (DRD)* in collaboration with three other societies: Botanical Society of America, Society for the Study of Evolution and Society for Economic Botany. This project will reinvigorate our effort to provide tools that will advance biology education through each of our digital libraries. Through this grant, the ESA EcoEd Digital Library (EcoEdDL) will work with the University of Wisconsin-Madison to introduce features such as the ability for users to tag resources and create personal collections. In the light of the Vision and Change findings, we are also excited about incorporating a data visualization tool, Science Pipes (Cornell University), into EcoEdDL to promote greater quantitative literacy and systems thinking.

While [tools](#) can empower, it is a motivated [community](#) that will create the change envisioned for a 21st century ecology education. [Share](#) your research findings in images, figures, datasets or classroom activities. Be part of the conversation on Vision and Change. Join us in building collaborative communities for teaching that will effectively engage a diverse generation of students to become ecologically literate and equipped with the tools they need for a career in ecology.

¹ESA Director of Education and Diversity Programs

EcoEd Digital Library

UPCOMING EVENTS

ESA Education Scholars Awards

For more information, [click here](#).

Deadline to apply: May 2, 2011

The ESA Education Scholars Award is a travel award to the 2011 ESA Annual Meeting in Austin, TX accompanied by appointments to one of two editorial positions to support the development of ESA's EcoEd Digital Library. This award recognizes leaders in ecology education. All faculty, postdocs, or Ph.D candidates in US institutions are eligible.

[EcoEd Digital Library](#)

If you have not seen it before, take the time to check out our EcoEd Digital Library! Our collection includes classroom activities, datasets, images, education research and much more.

STUDENT OPPORTUNITIES

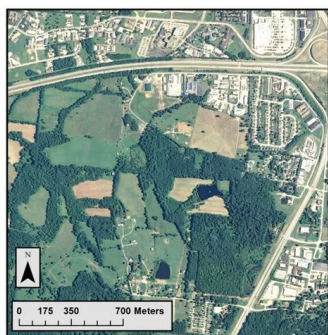
SEEDS fall field trip to Jornada Basin LTER in Las Cruces, New Mexico, October 6-9, 2011

Encourage your students to [apply](#)!

Deadline: May 9th, 2011.



EDITOR'S CHOICE

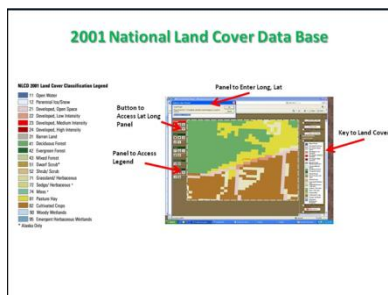


[Life on the Edge: Investigating Habitat Fragmentation, the Edge Effect and Associated Invasive Species in the Field by Tamara Sluss](#) is *Classroom Activity Editor's Choice* of EcoEdDL. This field activity will allow students to discover the impacts that human-induced habitat fragmentation has on multiple variables including, but not limited to air and soil temperature, canopy cover, and invasive species presence.

SCALING SCIENCE TO THE CONTINENT

[Using Web-Accessible Large Scale Data-Sets For Student-Active Learning](#)

The resources on available data presented through this webinar held on April 14th, 2011 are now available. The webinar featured Dr. Tom Langen, Clarkson University. This presentation is supported by NEON Inc., and is a product of the ESA-led Distributed Seminar sponsored by the [National Center for Ecological Analysis and Synthesis \(NCEAS\)](#).



REPORT

[Vision and Change](#)

The American Association for the Advancement of Science (AAAS) with support from the National Science Foundation (NSF) recently published the final report, *Vision and Change: An Undergraduate Biology Education. A Call to Action*. The document caps a four-year process of community engagement to mobilize change in undergraduate biology education, articulating the key concepts

OTHER RESOURCES



[NCSE-NASA Curriculum for Interdisciplinary Climate Change Education \(NNICCE\)](#) Lead Author: David Blockstein; Contributing Author: Maggie Surface



EcoEdDL PARTNERS

EcoEdDL Editorial Team:

Visual Resources:

Ken Klemow, Wilkes University

Classroom Activities:

Kathy Shea, St. Olaf College

Digital Resource Discovery (DRD) Project

[Botanical Society of America](#)

[Society for the Study of Evolution](#)

[Society for Economic Botany](#)

[Science Pipes, Cornell University](#)

DRD Advisory Board

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Data for the Ecology Classroom Advisory (DECA) panel

Ken Klemow(chair) , Wilkes University

Barbara J. Abraham, Hampton University

Colleen McLinn, Cornell Lab of Ornithology

Bibit Traut, City College of San Francisco

Sam Donovan, University of Pittsburgh

Beverly Brown, Nazareth College

Fernando Del Viso, University of Puerto Rico at Humacao

Courtney Sperger (undergrad), Wilkes University

Scaling Science to the Continent

[National Ecological Observatory Network, Inc](#)
[Science and Engineering Alliance, Inc.](#)

“NCSE-NASA Curriculum for Interdisciplinary Climate Change Education (NNICCE) is available on the [Encyclopedia of Earth](#) website. The resource has nine curricular modules for a general education course on climate change and is funded by a NASA Global Climate Change Education Grant. These nine components use NASA and other resources, including online assessments that faculty can readily adopt and adapt.

[Resources to mark First Anniversary of Gulf Oil Spill Disaster](#)

This month marked one year since the oil disaster in the Gulf of Mexico. The *Online Clearinghouse for Education And Networking - Oil Interdisciplinary Learning (OCEAN-OIL)* is a free, peer-reviewed collection of scientific information and educational resources about the *Deepwater Horizon* disaster and its broader energy and environmental issues.

[Understanding Evolution](#)

The enhanced Understanding Evolution website has been expanded to include a variety of materials to engage undergraduate students in evolution, including “Evo in the News” articles, labs, discussion topics and questions, and ideas for class projects.

Made possible by:



[National Center for Ecological Analysis and Synthesis](#)

Other Education Resources



Editors:

Teresa Mourad, Director of Education and Diversity Programs
Arturo Herrera, Education Programs Coordinator
Allison Kruk, ESA Intern

Photo Credit:

Image of the southern torrent salamander (*Rhyacotriton variegatus*) in the conifer forest habitat in the Pacific Northwest, by Margo Stoddard, found in [EcoEdDL](#).

For more visit www.esa.org/eeed

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