

Jigsaw

*Advancing
Student-Active Learning in
Ecology Education*



ECOLOGICAL SOCIETY OF AMERICA
esa

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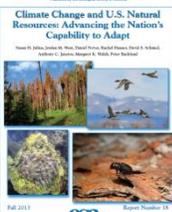
Photo from EcoEdDL: [Image showing Eucalyptus trees killed by prolonged flooding of the Menindee Lakes](#),
Richard Kingsford, Dept of Environment and Conservation, Australia

Special Feature: Habitat Loss

What's new in EcoEdDL

*Resources are free but an account is required. This is to help us understand our users better.
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ISSUES IN ECOLOGY

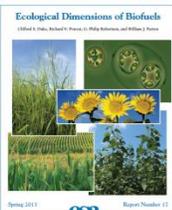


Issues in Ecology, Issue 18: Climate Change and U.S Natural Resources: Advancing the Nation's Capability to Adapt

Susan H. Julius, U.S. Environmental Protection Agency

This issue provides a broad perspective on approaches for adapting to climate change impacts on national water and land resources and biodiversity with examples from different management settings.

ISSUES IN ECOLOGY



Issues in Ecology, Issue 17: Ecological Dimensions of Biofuels

Clifford S. Duke, Ecological Society of America

This report summarizes the environmental effects of biofuels, illustrates some uncertainties about these effects, and identifies topics for an integrated research program aimed at clarifying tradeoffs and reducing uncertainties in planning for sustainable biofuels production.

Upcoming Events

The 2015 Ideas & Innovations Virtual Conference

(for K12 educators)

March 23- 25, 2015

[Register here.](#)

Gordon Research Conference:

Undergraduate Biology Education Research

July 12-17, 2015

Bates College, ME

[Application](#) due June 14, 2015

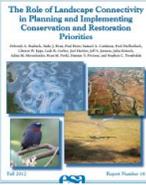
2015 Annual Meeting of the Mid-Atlantic Chapter of the Ecological Society of America, "Careers in Ecology"

April 17-19, 2015

Elizabethtown, PA

[Registration](#) Due March 27, 2015

ISSUES IN ECOLOGY



Issues in Ecology, Issue 16: The Role of Landscape Connectivity in Planning and Implementing Conservation and Restoration Priorities

Deborah Rudnick, *Integral Consulting Inc.*

This Issue identifies substantial uncertainties in mapping connectivity and evaluating resilience to climate change. It also talks about integrating human and natural landscape conservation planning to enhance habitat connectivity is essential for biodiversity conservation.

Announcements

Earth Day & Arbor Day: Coming soon in April! Look for specific events in your local area and participate to make the world better. Check out these websites for more info and share your activities on the **ESA Education FaceBook page!**

<http://www.earthday.org/what-can-you-do-earth-day>

<http://www.earthday.org/greencities/earth-day-highlight-events/>

<http://www.arborday.org/celebrate/dates.cfm>

Call for Proposals: Resources for Ecology Education Fair and Share (REEFS) Half Day workshop at ESA Annual Meeting

You are invited to present your ideas to engage undergraduate students using active learning methods and get feedback from your peers. New ideas are also welcome. Sign up to share your resources and methods REEFS workshop.

Reports

Realizing STEM Equity and Diversity through Higher Education Community Engagement (2015)

This White Paper, supported by NSF, presents a promising approach to advancing equity in STEM fields gleaned from an international workshop on the role of institutions of higher education in fostering P-20+ community engagement through knowledge production, human capacity building (including broadening participation and the integration of research and education), innovation, and social cohesion. Check out STEM-Central.net working groups for more resources.

Achieving Systemic Change: A Sourcebook for Advancing and Funding Undergraduate STEM Education (2015)



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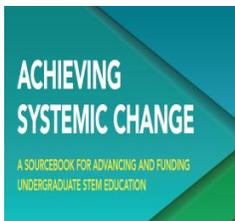
ESA Education & Diversity programs staff

Teresa Mourad, Director of Education and Diversity Programs

Programs

Fred Abbott, Diversity Programs Coordinator

Programs Coordinator



The sourcebook discusses the outcomes of a two-day workshop on how best to effect systemic change in order to achieve widespread and sustained transformation of undergraduate STEM education.



Co-Designing the Future: The Role of the Private Sector Partnering in Education (2015)

This report features case studies of how business is addressing existing gaps in STEM Education, Workforce Readiness, and Access to Technology and Resources, etc throughout the country.

Aileen Hwang, Education Intern

Education Resource Partners



Resources



Special Feature: Habitat Loss

Resources are free but an account is required. This is to help us understand our users better. Login to EcoEdDL to download the resource.



Pacific trillium (Trillium ovatum) flowering in the Siskiyou Mountains of Oregon

Erik Jule, Humboldt State University

This photograph illustrates a wildflower species affected by habitat fragmentation. Forest fragmentation has increased mouse populations, resulting in increased seed predation that may decrease recruitment rates and increase local extinction risks for trillium.



The Dos Bocas dam in Puerto Rico

Effie Greathouse, Oregon State University

The Dos Bocas dam in Puerto Rico was built in 1942 to generate hydroelectric power. Dams in this region prevent the migration of shrimp and fish to areas upstream of the dam. Loss of migratory shrimp and fish upstream from dams alters basal resources and assemblages of invertebrate competitors and prey.



What's Killing the Coral Reefs and Seagrasses?

Charlene D'Avanzo, Hampshire College

Students examine published data that address the causes of coral and seagrass decline in Florida. Activities engage students in data analysis and hypothesis testing and will increase their understanding of the complexities of ecological phenomena.

Want more Habitat Loss? Click [here!](#)
Have a Habitat Loss to share? [Submit here!](#)

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