

Jigsaw

*Advancing
Student-Active Learning in
Ecology Education*



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Photo from EcoEdDL: [Image showing the aerial view of Lake Christina, MN \(ca. early 1980s\)](#), Thomas Carlson, Minnesota Department of Natural Resources

Special Feature: Water Sustainability

What's new in EcoEdDL

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



Fish Schooling Simulation to Teach Tradeoffs in Animal Behavior

Renee L. Rosier, Penn State Wilkes-Barr, photo credit: Tim R. McClanahan, Marine Programs, Wildlife Conservation Society

This activity promotes deeper understanding of antipredator behavior tradeoffs and creative thinking by having students play the role of fish, predators, and refuges in a simulation of schooling behavior. Through repeated simulations, the students learn how to identify predators and which strategies helped them to survive. The activity promotes active small group and class discussions and can be scaled to fit a variety of class times and education levels.

Announcements

Call for Proposals for Resources for Ecology Education Fair and Share (REEFS) Half a day Workshop at ESA Centennial Meeting, Baltimore

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

2015 Research Experience for Teachers (RET) Program

June 22- August 7

(Program includes June 22-26

Bioenergy Institute for

Educators at the UW-Madison)

Kellogg Biological Station, MI and WU- Madison

[Application](#) Due March 20, 2015

Bioenergy Institute for Educators(BIE)

June 22-26, 2015

UW- Madison

[Application](#) Due May 1,2015

Energy Institute for Educators

August 10- 13, 2015

UW- Madison, WEI

[Application](#) on a rolling basis through spring 2015

National Science Teachers

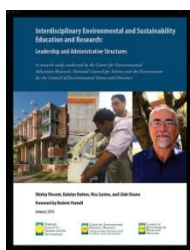
Make plans now to attend the Big Birthday Bash! It is ESA's Centennial! To celebrate, we are organizing a half-day REEFS workshop on Sunday August 9. Whether you have a tried and tested lab, field or classroom activity or a brand new teaching idea, we invite you to present your ideas to engage undergraduate students using student-active methods. We are looking for presenters. Sign up to share your active learning resources and methods with others. For more information, contact Carolyn Thomas, ESA Education Section Chair

Share Your Teaching Resource this Spring!

We invite you to share your teaching resources to one of these peer-reviewed collections.

- [ESA EcoEd Digital Library](#), a portal of the LifeDiscoveryEd Digital Library. Accepts images, datasets, videos, figures and tables and learning activities. All resources should be accompanied with recommendations for pedagogical use.
- [CourseSource](#) ESA has developed the Ecology Learning Framework to guide the development of teaching material for submissions. Articles in the new journal spans across all the undergraduate biological sciences.
- [Teaching Issues and Experiments in Ecology \(TIEE\)](#), an online education journal coordinated by ESA's Committee for Education and Diversity. Accepts teaching ideas for labs, and those using figure sets and data sets.

Reports



National Council for Science and Environment announces new research report (2015). Leaders are profiled to present their views on interdisciplinary program management and illustrate the diversity of approaches across the country. The report offers the landscape upon interdisciplinary environmental and sustainability education.

Green 2.0

The State of Diversity in Environmental Organizations: Mainstream NGOs, Foundation & Government Agencies. (2014). Dorceta Taylor. This comprehensive report examines why decades of promises to diversify

are falling short in the mainstream environmental movement. The report concludes that the movement is still a predominantly “white “Green Insiders’ Club.””

Association (NSTA) National Conference

March 12-15, 2015,
Chicago, IL

[Registration](#) advance due Feb 13, 2015

NSTA STEM Forum & Expo May 20-23, 2015

Minneapolis, MN

[Registration](#) for Early bird due March 27, 2015

A Network for Academic Renewal Conference

November 12- 14, 2015
Seattle, Washington

[Call for proposals](#) Due March 18, 2015



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Resources



Special Feature: Water Sustainability

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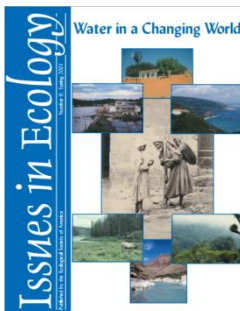


Follow the Water

CUAHSI, contact Emily Geosling, Communications and Outreach Manager

This video introduces the hydrologic cycle and roles of water in ecology; sculptor, solvent for minerals, a vector of transport and creates habitats. By following water through the landscape we can see connections between

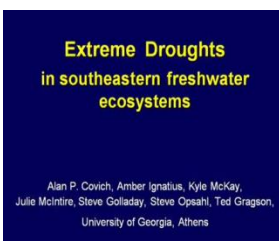
life and the physical environment.



Issues in Ecology, Issue 09: Water in a Changing World

Steven Running, Stephen Carpenter, Sandra Postel, Robert Naiman, Robert Jackson, Diane McKnight, Clifford Dahm

This report illustrates the disruption of the global water cycle as a result of human activities. The report explains ground water processes, global distribution of freshwater resources, and differences between renewable and non renewable sources. It can be used for general information, classroom reading and discussion.



Extreme Droughts in the Southeast- How Do We Sustain Ecosystem Services? *Alan Covich, University of Georgia*

Adaptations to climatic changes among water users provide examples of how water can be spatially distributed to protect in-channel habitats and biodiversity as well as to supply predictable water for socio-economic needs during

periods of highly variable precipitation. These comparative studies improve our understanding of how socio-economic adaptations such as constructed ponds and lakes have transformed the landscape and altered the biodiversity essential for sustaining freshwater ecosystem services.

Want more Water Sustainability resources? [Click here!](#)
Have a Water Sustainability resource to share? [Submit here!](#)

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