

# Jigsaw

Advancing  
Student-Active Learning in  
Ecology Education



ECOLOGICAL SOCIETY OF AMERICA  
**esa**

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Photo Credit from EcoEdDL: [Low-intensity fire in a red and white pine ecosystem](#) by Donald Dickmann.

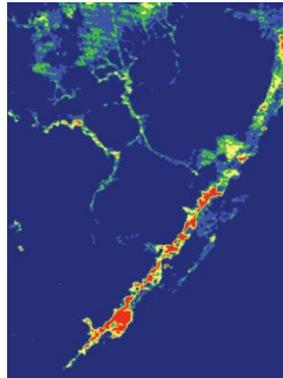
## Special Feature: Communities and Disturbance

### What's new in EcoEdDL

#### [Sea Surface Warming in the Florida Keys](#)

By Patricia Hackbarth

This image illustrates the rise in sea surface temperature in the Florida Keys between 1985 and 2005. The resource is useful for discussions of climate change and its impacts on marine ecosystems or biodiversity.



#### [Understanding Human Demography Using the Science Pipes Demography Module](#)

By Ken Klemow and Paul Allen

This investigation activity helps students analyze birth and death data collected from cemeteries to produce life tables, survivorship curves, and histograms, using a data workflow system called Science Pipes. Students are asked to pose and test hypotheses about demographic attributes of human populations, using data from a variety of sources.

### Announcement

#### [SEEDS Undergraduate Research Fellowship Applications](#)

Applications for the ESA SEEDS Undergraduate Research Fellowship awards are now open. Students from underrepresented minority backgrounds are especially encouraged to apply.

### Upcoming Events

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

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

#### [2013 NABT Professional Development Conference](#)

January 22-25, 2014 | Washington, DC

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## Reports & Tools



### [Interdisciplinary Environmental and Sustainability Education on the Nation's Campuses 2012: Curriculum Design](#)

(National Council for Science and the Environment, 2013)



### [STEM Education Data and Trends](#)

(National Science Board)

In a recent [press release](#) the National Science Board announced the availability of this tool that intuitively displays current data related to STEM education in the U.S.

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## Resources



### ***Special Feature: Communities and Disturbance***

### [The Floristic Relay Game: A Board Game to Teach Plant Community Succession and Disturbance Dynamics](#)

By Vanessa B. Beauchamp, Juliet C. Stromberg, and Elena Ortiz-Barney

This game introduces students to the concept of succession and plant community dynamics. Students play a board game in which each student represents an imaginary plant species. Students explore plant community dynamics by interacting with each other and responding to chance events.

### [Biodiversity Responses across a Gradient of Human Influence](#)

By Christopher Lepczyk

This lab classroom activity helps students to investigate how species, communities, and habitats change over the rural-urban (or pristine to human-dominated) gradient. Biological inventories and field measurements will take place outdoors, while the remaining aspects take place in the laboratory.

## Education Resource Partners



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## Comparing the Influence of Precipitation, Fire, and Topography on Plant Productivity in the Tallgrass Prairie

By John Blair and Jesse Nippert



This Data Set allows students to use long-term data from Konza to explore the relationships between multiple characteristics of a tallgrass prairie ecosystem and the productivity of prairie plants. Students will develop an understanding of how fire, topography, and precipitation influence tallgrass prairie productivity and how these factors vary over time.

## The Invasive Grass-Fire Cycle in the U.S. Great Basin

By Jennifer Balch, Marnie K. Carroll, and Bethany A. Bradley

In this classroom activity, students will exercise critical thinking skills to form a hypothesis on how cheatgrass alters fire behaviors. Students will analyze data and answer questions based on their interpretation of field-based data and satellite data. Using this information, students will collaborate to create maps and graphs.

[For more resources related to Community and Disturbance in EcoEd Digital Library, click here](#)

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