

# Jigsaw

Advancing  
Student-Active Learning in  
Ecology Education



ECOLOGICAL SOCIETY OF AMERICA  
**esa**

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Photo Credit from EcoEdDL: [The sunset wrasse \(Thalassoma grammaticum\), one of many shorefish species endemic to the isolated Tropical Eastern Pacific](#)  
by G.R. Allen

## Special Feature: Oceans

### What's New in EcoEdDL

#### [Urban to Rural Gradients — Exploring Trends in Organismal, Community and Ecosystem Ecology](#)

by Mary Ann Vinton

The exercise is firmly grounded in the ecological literaturae and emulates a typical scientific study. It first focuses on a review of the literature, suggests some possible urban-rural patterns, and then offers empirical studies that try to test the existence or mechanisms underlying the patterns.

#### [The Sustainable Use of Fisheries](#)

by Christopher X Jon Jensen

The Evolution of Sustainable Use is a flash-based game that allows multiple players to simultaneously exploit a model fishery. The game presents a fishery as a metaphor for any communally-exploited resource. This imaginary fishery is scaled down so that the actions of 2-8 players influence the sustainability of the system. The game is currently configured to play in two modes. In the first mode, each year the fish population is replenished to the same level regardless of how heavily it was exploited in the previous year. In the second mode, the growth of the fish population is realistically dynamic.

### Upcoming Events

[Society for the Advancement of Biology Education Research Annual Conference](#)

July 11–14, 2013 | University of Minnesota, Twin Cities

[Botanical Society of America Annual Conference](#)

July 27–31, 2013 | New Orleans, LA

[Ecological Society of America Annual Conference](#)

August 4–9, 2013 | Minneapolis, MN

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[Society for the Study of Evolution](#)  
[Society for Economic Botany](#)  
[Science Pipes, Cornell University](#)

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## Announcements

### Jigsaw Reader Survey

We thank everyone who took the time to fill out our survey on Jigsaw. Your feedback will be valuable in determining how best to use Jigsaw to serve your needs.

### Scaling Up – Future of Environmental Decisions Student Workshop – June 2 – 7, 2013

In a week-long workshop, 25 undergraduate and graduate students from diverse disciplinary backgrounds explored a case study of the Potomac River Basin situated within the Chesapeake Bay watershed with a rich ecological and socioeconomic dataset prepared by the University of Maryland Center for Environmental Science. Workshop activities included science communications exercises, a fieldtrip focused on data collection and conversations with environmental management professionals. These helped students appreciate the interaction of local and regional scales, as well as the potential, and limitations of data. The workshop was organized by ESA with support from the National Science Foundation and was intended to prototype approaches to continental-scale education in support of the [NEON project](#).

### Featured Sessions at the ESA Annual Meeting

#### Call for Teaching Ideas:

#### Resources for Ecology Education Fair and Share (REEFS)

**Monday, August 5, 2013: 10:15 AM-11:30 AM**

**Session Format:** This session is designed to create or revise lesson plans or activities with a peer working group. Each lesson or idea will be presented by the author in a small group with up to 9 other participants. There will be time for each author to describe their lesson idea. Then discussions will follow to provide feedback and ideas regarding the core concepts, methodology, misconceptions, assessment or educational extensions. Participants will circulate among presenters at 15 – 20 minute intervals.

**Sign up to share your ecology education resource:**

<https://www.surveymonkey.com/s/REEFS2013>

#### Invitation to an EcoEdDL Workshop:

#### Your Teaching Resource & ESA's EcoEd Digital Library

Monday, August 5, 2013: 8:00 PM-10:00 PM

- What is your favorite ecology focused classroom, lecture hall or

#### DRD Advisory Board

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#### Education Resource Partners



laboratory activity?

- Want to share this resource with other educators?

**Session Description:** Join us to for a walkthrough of submitting a resource to EcoEd Digital Library, ESA's peer-reviewed online digital commons. Learn how the peer review process works. For more info click [here](#).

**Interested participants should:**

- 1) Complete brief form: <http://www.surveymonkey.com/s/ESA2013-EcoEdDLWorkshop>
- 2) Review the EcoEdDL [submission guidelines](#)

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## Resources

### *Special Feature: Oceans*



#### Marine Ecology, Human Impacts, & Conservation

This series of lessons and activities for high school students introduces them to marine ecology and ocean conservation.



#### NOAA Photo Library

Explore the National Oceanic and Atmospheric Administration's large photography library.

#### **Resources in EcoEdDL about oceans**

#### Marine Reserve Design: Simulating stakeholder options

In this simulation, students are provided with information about a hypothetical island state, named Udubia, which will build a marine reserve. Each student will choose a character representing a stakeholder in the placement and design of the reserve.



#### The Great Barrier Reef Marine Park: Conflict and Consensus in Marine Conservation

This case study explores: the historical antecedents to establishing the Great Barrier Reef Marine Park (GBRMP); the physical, biological, social, economic, and

cultural settings; the processes of implementing and managing the park; the lessons learned from over 30 years of experience; and current issues.

**There are 35+ more in EcoEd DL resources on oceans and marine environments.**

**Made possible by:**



National Science Foundation  
WHERE DISCOVERIES BEGIN

To view past issues of **Jigsaw Jigsaw** go to [ESA's Jigsaw about page](#)

To learn more about **EcoEd Digital Library** go to: <http://ecoed.esa.org/>

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