



Jigsaw – A technique for Student-Active Learning Published by ESA Department of Education and Diversity Programs

August 2011

Vol. 1 Issue 5

#### PHOTO CREDIT FROM EcoEdDL

A grey tree frog (Hyla versicolor). By Rick Relyea.

# ESA NEWS ESA 96th Annual Meeting SEEDS



The SEEDS Program supported the attendance of 33 students at the 96<sup>th</sup> ESA Annual Meeting, with 27 presenting their research, and four alumni acting as mentors. SEEDS students and alumni led **two field trips** (an Urban Bioblitz and a "Toxic Tour"); a **symposium** on Revolutionary Ecology Part II; an **organized oral session** on Action Ecology for All; and **two** 

**workshops** (Diversity and Inclusiveness, and an Active Ecologists Guidebook). Three students served as **panelists** at the Diversity Luncheon and SEEDS alumni led the Diversity Mixer events.

#### **Education Workshops**

The three education workshops at ESA's 96<sup>th</sup> Annual Meeting featured in the July issue—*How to Publish in EcoEdDL, Student-Active Teaching Approaches,* and *Resources for Ecology Education Fair and Share (REEFS)*—were very successful and drew nearly 70 participants altogether. A variety of innovative and interesting education resources were shared, discussed, and developed; opportunities for publication in <u>EcoEd Digital Library</u> and <u>TIEE</u> were also described in detail. <u>The ESA Education Scholars</u> are now working with Annual Meeting attendees to submit resources to EcoEdDL; check back soon for new featured activities and images!

#### **National Ecological Observatory Network (NEON)**

In partnership with the <u>Science and Engineering Alliance</u> and NEON Inc., ten faculty from Historically Black Colleges and Universities and a Tribal College met in Austin, TX. The session *Discovering NEON Science and Education in Collaboration with Minority-Serving Institutions* addressed the current status of the NEON project and ways to incorporate continental-scale data into their programs.

Leaders in Environmental Action for the Future (LEAF) Educator Retreat Sixteen high school educators in the LEAF Educator Network participated in a retreat co-organized with The Nature Conservancy, in conjunction with the ESA Annual Meeting on Aug 8-9, 2011. The LEAF Educator Network is a partnership between ESA, TNC and environmental-themed high schools in urban areas. Educators had an opportunity to attend scientific sessions and interact with ESA members. The retreat highlighted the scientific method, environmental

#### **UPCOMING EVENTS**

Call for Applications!
BiosciEdNet (BEN) Scholars
Program for Undergraduate Life
Sciences Faculty

#### Deadline September 22

The National Science Digital Library (NSDL) BEN Scholars Program selects undergraduate life sciences educators to learn about and promote the use of digital library resources and student-centered teaching approaches in higher education. Scholars perform outreach and receive professional development opportunities, as well as a stipend. Apply online or email questions to Gerard Boulin at gboulin@aaas.org.

#### SEEDS Undergraduate Research Fellowships

ESA has just received a supplemental award from the National Science Foundation to support four undergraduate SEEDS Research Fellows for the 2012-2013 year. Students with graduation dates no earlier than Spring 2013 are eligible; please encourage your students to apply. More details about the award will be released in September. For updates, please visit <a href="https://www.esa.org/seeds">www.esa.org/seeds</a> or contact <a href="mailto:Melissa@esa.org">Melissa@esa.org</a>.

Cornell University Civic Ecology Lab Offers Online Course for Environmental Educators Entitled "Environmental Education in sustainability and models for incorporating environmental issues across the high school curriculum.

#### **EcoEdDL's New Copyright and Licensing Policy**

Resources in EcoEdDL are now shared under a <a href="Creative Commons Attribution-NonCommercial-ShareAlike License">Creative Commons Attribution-NonCommercial-ShareAlike License</a>. Under this license, registered users of EcoEdDL are free to use, copy, distribute, and adapt resources for noncommercial purposes as long as the appropriate citations are made, and derivative works are licensed under the same terms. Copyright holders still retain their rights to resources shared via EcoEdDL, and those submitting non-original works must obtain permission from the original copyright holder. <a href="Read more about the new policy">Read more about the new policy</a>.

#### **REPORTS**

#### Report: "NSF to fund NEON Construction Beginning in Fall 2011"

The National Ecological Observatory Network (NEON) has received \$18 million from the National Science Foundation (NSF) to begin construction on a \$434 million project that will see the completion of 62 data collection sites across the United States. Designed to monitor climate change on a continental scale over a 30 year period, the project will collect data on changes in biodiversity, land use, and natural resources using the latest technology. Scientists, educators, and policymakers could have access to this key climate change data as early as fall 2012.

# Report: "Workshops without Walls: Broadening Access to Science around the World"

Published in August 2011 in Public Library of Science (PLoS) Biology, this report by Arslan et al describes a workshop conducted by the NASA Astrobiology Institute (NAI) in 2010. One of two "Workshops Without Walls," the event brought 560 scientists, educators, science writers, and citizens from 31 states and 30 countries together virtually via an "integrated suite of collaborative technologies." Science blogs, videoconferencing, online meetings and social media were used to discuss the latest research on the origins of life and molecular paleontology. The report uses this event as a case study to explore the potential of technology to foster interdisciplinary collaboration and public engagement in science while avoiding the environmental costs of travel.

#### **RESOURCES**

#### Journey to Planet Earth: A PBS Television Series

Each of the 12 episodes of <a href="mailto:this educational series">this educational series</a>, funded by numerous government and nonprofit supporters including NSF, focuses on the balance between human needs and environmental stewardship. A newsletter and resources for educators are also provided, with <a href="mailto:some resources">some resources</a> specifically targeted to college-level instructors.

# **Teaching Climate Science and Energy Awareness**

The <u>Climate Literacy and Awareness Network</u> (<u>CLEAN</u>), is a new pathway of the <u>National Science Digital Library (NSDL)</u>. Dedicated to providing peer-reviewed, annotated resources on climate change science education, the CLEAN site now offers a <u>collection of climate change literacy principles</u> that link to a variety of

Urban Communities," this 12-week course is being offered through EECapacity, a national environmental education training program supported by EPA. The fee is \$50 and there is limited space. Apply online by September 2!

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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
Denny Fernández del Viso, UPR--Humacao
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Meg Lowman, NC Museum of Nat. Sciences (VP for Education & Human Resources) Aurora MacRae-Crerar, UPenn (Student Sect.) Bob Pohlad, Ferrum College Carlos de La Rosa, Catalina Island Conservancy teaching resources for students ranging from middle school to upper-level college. Each principle focuses on central scientific concepts, broader environmental and social implications, and specific teaching issues and challenges. Photo Credit: CLEAN.

#### Earth: A Graphic Look at the State of the World



The Canadian Global Education
Project has created an executive
summary of the state of the
planet, illustrated using charts,
maps, and other detailed visual
displays. Intended to provide
comprehensive, objective
information about the Earth, the
site provides data and
educational resources on a wide

range of topics, including global ecology, freshwater systems, pollution, and fishing. Photo Credit: <u>Global Education Project.</u>

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