

PHYSIOLOGICAL ECOLOGY SECTION, 2011

MISSION, OFFICERS, AND MEMBERSHIP The Physiological Ecology Section promotes research and teaching that explore interrelationships among the functions of organisms and their environments. As of January 2010, Zoe Cardon (Marine Biological Laboratory) completed her term as President of the Section. Will Pockman (University of New Mexico) took over for a two-year term, with goals of continuing to build on the work of previous years to provide as many opportunities for students and early career scientists working in physiological ecology and to facilitate the submission of as many stimulating symposia and organized oral sessions as possible in the field. Jennifer Funk (Chapman University) is serving her second year as Secretary. During autumn 2011, a new Secretary will be elected. Many thanks to Doug Aubrey (University of Georgia) for serving as the Student Section liaison last year. Greg Goldsmith (UC Berkeley) has agreed to take over as liaison for the 2011-2012 year. Webmaster Rob Jackson continues his long-term service to the section; our web site is <http://www.biology.duke.edu/jackson/ecophys/>.

We have broad section membership, and many members are also part of the Biogeosciences, Education, Rangeland Ecology, Researchers at Undergraduate Institutions, Soil Ecology, Urban Ecosystem Ecology, and Vegetation Sections. This year, our Section-sponsored symposium planned for Austin (see below) -- organized by Rob Jackson (Duke) -- addresses ESA's Planetary Stewardship initiative and is linked to three additional Organized Oral Sessions focusing on more specific aspects of Earth Stewardship.

STUDENT AWARDS

First, THANK YOU to all the judges who make it possible to offer these awards each year. Your efforts keep our Section's activities going; we greatly appreciate your willingness to serve.

- *Student Travel awards*
New student travel awards were continued this year thanks to the generous support of an anonymous donor who will continue to support these awards for the next four years. In 2010, we had 13 applicants, and a panel of judges selected winners based on (1) the student's research and on (2) the potential for attending the conference to contribute to the student's professional development. Five students (one undergraduate and four graduate students), listed below, received \$500 each to help offset the cost of attending last year's ESA meeting. 2011 winners will be introduced at the Physiological Ecology Section Mixer in Austin.

Selita Ammond (University of Hawai'i at Mānoa)
Colleen Butler (Tufts University)
Danica Lombardozzi (Cornell University)
Daisha Ortega (California State University, Fullerton)
Claire Wainwright (UC San Diego)

- The Billings Award and the New Phytologist Poster Award are given to students each year to recognize significant advancements in physiological ecology. Students giving oral and poster presentations at the annual ESA meetings can enter, and entrants are judged on the rigor, creativity, importance, and quality of presentation of the research. The **New Phytologist Trust** has long contributed to the Billings Fund, which supports prizes for both the Billings Award and the New Phytologist Poster Award. Continuing thanks to New Phytologist Trust. Thanks also to **Elsevier** for supporting student efforts; since 2002, Elsevier has donated books to student winners and honorable mentions of the two award competitions. Finally, thanks to Chuck

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Crumly and the **University of California Press** for their continuing donation of a book to the winners and honorable mentions in each competition since 2010. The competitions attracted 23 and 24 applicants in 2009 and 2010 and 24 students are signed up for the competitions at the 2011 Austin meetings. In Pittsburgh, 2010, the winners and honorable mentions were:

Billings award, 2010

Winner: **John Drake**, University of Illinois, gave an oral presentation on “Physiological causes of the age-related decline in pine forest productivity” with co-author Evan H. DeLucia.

Honorable mention: **Danica Lombardozi**, Cornell University, gave an oral presentation on “Ozone-induced decreases in photosynthesis and transpiration: modifying Farquhar and Ball-Berry models” with co-authors Gordon Bonan, Samuel Levis, and Jed P. Sparks.

New Phytologist Poster award, 2010

Winner: **Claire Wainwright**, UC San Diego, presented a poster on “Seasonal priority effects: Implications for invasion and restoration in California coastal sage scrub” with co-author Elsa Cleland.

Honorable mention: **Jingjing Yin**, University of Georgia, presented a poster on “The effects of nitrogen fertilization and elevated CO₂ on water relations of loblolly pine (*Pinus taeda* L.) seedlings in a water-limited environment” with co-author Robert O. Teskey.

PLANT, CELL & ENVIRONMENT POSTDOCTORAL AWARD

In July 2011, the journal *Plant, Cell & Environment* (Dr. Keith Mott, Editor-in-Chief), published by Blackwell, agreed to contribute funds to create an award for the best oral presentation by a postdoctoral scientist within the field of physiological ecology at the ESA Annual Meeting. The award will be given to a scientist who has completed their Ph.D. within the last 5 years. The implementation of this award in future years will be a topic of discussion among the membership at the 2011 business meeting.

SECTION ACTIVITIES AT THE PITTSBURGH 2011 ESA MEETING

Mixer and Business Meeting

At Austin, August 10 2011, our Physiological Ecology Section will hold its mixer and business meeting on **Wednesday evening, 6:30 PM-8:00 PM Ballroom G**, Austin Convention Center. Topics for discussion include:

- (1) Continuing the discussion of our section’s contributions to ESA’s initiative in Planetary Stewardship.
- (2) How can we manage the burden on section members associated with reviewing applications for travel awards and judging student awards?

Sponsored symposium and organized oral session at ESA in Austin, 2011

Sponsored Symposium:

SYMP 2 - Earth Stewardship: Defining the Scientific Challenges and Opportunities

Monday August 8, 1:30 - 5:00 PM, Ballroom C

Organized by Rob Jackson

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see: <http://eco.confex.com/eco/2011/webprogram/Session6763.html>

see also three OOS sessions linked to this symposium:

OOS 7 - Earth Stewardship in Action: Examples and Milestones

<http://eco.confex.com/eco/2011/webprogram/Session6758.html>, Tuesday Aug 9, 8:00 - 11:30 AM

OOS 21 - Earth Stewardship: Communicating and Fostering Stewardship Behavior

<http://eco.confex.com/eco/2011/webprogram/Session6721.html>, Wednesday 8:00 - 11:30 AM

OOS 26 - Emerging Issues in Earth Stewardship: An Intersection between Science and Society

<http://eco.confex.com/eco/2011/webprogram/Session6744.html>, Wednesday Aug 10, 1:30 - 5:00 PM

Organized Oral Session supported with Long Term Planning Funds through the section:

OOS 31 - Measuring and Modeling Roots, the Rhizosphere, and Microbial Processes Belowground

Wednesday August 10, 1:30 - 5:00 PM, room 15

Organized by Luke McCormack and David Eissenstat

see: <http://eco.confex.com/eco/2011/webprogram/Session6727.html>

SECTION RESOURCES

Web site: Reminder! Our web site is <http://www.biology.duke.edu/jackson/ecophys/>. The web site is very dynamic and packed with information about:

- faculty, postdoc, graduate, technician, and undergraduate positions,
- meetings of interest to our membership and links to other societies
- resources for teaching and mentoring, time management, and writing
- books, equipment, and more!

Section booth at the ESA meetings: In 2009, we established the Physiological Ecology Section Booth at the annual meeting. The booth served as a Section focal point, featuring:

- an area to post job announcements
- a listing of all the student entrants in the award competitions (and the judging ballot box)
- display of the winning student poster from the previous meeting

The Section will have another booth in Austin this year.

Submitted by:

Will Pockman

President, Physiological Ecology Section, ESA