Resilience scholars have at times been skeptical of formal education, including environmental education, in part because it is viewed as prescriptive and individualistic rather than as facilitating the social learning processes that are integral to adaptive co-management. On the other hand, an environmental education that addresses these concerns could be an important component of managing social-ecological systems. To help explore emerging scholarship at the confluence of resilience, learning, and environmental education, we propose a discussion led by a panel of editors and authors of a forthcoming volume, Resilience in Social-Ecological Systems: the Role of Learning and Education (edited by ME Krasny, C Lundholm, and R Plummer, published by Taylor and Francis in early 2011; also published as Special Issue of Environmental Education Research in fall 2010). Drawing on the book chapters, the panel will address questions such as: What kind of environmental learning can enhance resilience at individual and institutional levels, and how would this learning enhance social-ecological system resilience? How might environmental education and learning taking place in secondary and higher education, in informal settings such as community participation in natural resources management, and in more formalized governance networks contribute to social-ecological system resilience? What learning, governance, and other theoretical frameworks might aid in understanding the relationships among resilience, learning, and environmental education?

In the contributions to the book, authors explore not only environmental education as a formal system targeting young and lay learners, but also more broadly as a learning strategy that can be nested in adaptive co-management practice. Just as the management and resilience literatures suggest ways to broaden our thinking about environmental education strategies, environmental education may suggest ways in which governance organisations can expand beyond informal networks of information sharing to more formal strategies aimed at enhancing environmental knowledge, changing behaviors, and developing skills needed for contributing to a democratic society.

As the panel members share their diverse perspectives on resilience, learning, and education, the ways in which resilience might add to the discussion of environmental education pedagogy and research will be illuminated. Similarly, ways in which environmental education might work in concert with management practices that seek to foster resilience will emerge, as will ideas about the overlap among learning processes in resource management and environmental education. Many of the ideas and suggestions will be speculative, and need to be tested through further debate such as will be facilitated through the panel, as well as through scholarship and research.
Through a series of short presentations and interactive discussions, the panel members will invite the session participants to engage in discussion, contributing ideas and critiques that will be compiled for sharing among the knowledge, innovation, and social-ecological learning theme.

Panel participants and papers:

Ryan Plummer – “Social-Ecological Resilience and Environmental Education: Synopsis, Application, Implications”


Keith Tidball, Marianne Krasny, Erika Svendsen, Lindsay Campbell, Kenneth Helphand – “Stewardship, learning, and memory in disaster resilience”

Lisen Schultz, Cecilia Lundholm – “Learning for resilience? Exploring learning opportunities in Biosphere Reserves”