Learning for resilience? Exploring learning opportunities in Biosphere Reserves

Lisen Schultz, Cecilia Lundholm

Panel title: Environmental Education, Learning, and Social-ecological System Resilience

The interdependence of society and nature, the inherent complexity of such social-ecological systems, and the global deterioration of ecosystem services provide the rational for a growing body of literature focusing on social-ecological resilience - the capacity to cope with, adapt to, and shape change - for sustainable development. Processes of learning-by-doing and multiple-loop social learning across knowledge systems and different levels of decision-making are envisioned to strengthen this capacity, combined in the concept of adaptive governance. This study explores how learning for resilience is stimulated in practice; investigating learning opportunities provided in UNESCO designated Biosphere Reserves. A global survey (N=148) and qualitative interviews with key informants of selected Biosphere Reserves (N=10) reveal that a subset (79) of the Biosphere Reserves serve as ‘potential learning sites’ and a) provide platforms for mutual and collective learning through face-to-face interactions, b) coordinate and support the generation of new social-ecological knowledge through research, monitoring and experimentation, and c) frame information and education to local stewards, resource-based businesses, policy-makers, disadvantaged groups, students, and the public. We identify three Biosphere Reserves that seem to combine, in practice, the theoretically parallel research areas of environmental education and adaptive governance. We conclude that Biosphere Reserves have the potential to provide insights on the practical dimension of nurturing learning for social-ecological resilience. However, for their full potential as learning sites for sustainability to be released, both capacity and incentives for evaluation and communication of lessons learned need to be strengthened.