



MSI Special Seminar

From principles to practice: National approaches to managing biodiversity under climate change

Will Steffen

Executive Director, ANU Climate Change Institute
Science Adviser, Department of Climate Change & Energy Efficiency,
Australian Government

9:30–10:30 am, Monday, 26th July 2010
Monash Sustainability Institute, Building 74, Clayton

All welcome. No RSVPs necessary.

Abstract

Climate change acts as a new and complex stressor on all levels of biodiversity from genes to ecosystems, interacting with a large number of historical and existing stressors.

This talk, based on an assessment of the vulnerability of Australia's biodiversity to climate change, breaks new ground in several ways.

First, it focuses on fundamental ecological principles rather than on climate scenario-driven impact studies on individual species, given the high degree of uncertainty surrounding specific scenarios and the lack of research on the indirect effects at the community and ecosystem levels.

Second, concepts such as resilience and transformation provide positive, pro-active avenues for reducing the vulnerability of biodiversity to climate change despite lack of knowledge about system-level responses and the large uncertainties associated with the projections of future climate.

Third, the nature and magnitude of the climate change challenge imply that innovative, more cost effective governance systems and a much larger resource base will be required to implement new and revised strategies.

Finally, a more systematic regional approach to biodiversity conservation can build on existing and projected socio-economic trends characteristic of particular regions as a platform for improving biodiversity outcomes.