

# NGEN17: Global Ekosystem Dynamics (15 credits)

## Reading list 2018

The course is based on the e-book *Climate change biology* edited by Lee Hannah (2015). The book consists of 20 chapters and covers basic concepts and terminology needed to understand the different course modules. The book ties the different parts of the course together and makes reference to how they are linked. It is available for free at [www.sciencedirect.com/science/book/9780124202184](http://www.sciencedirect.com/science/book/9780124202184), and it is recommended to read the texts to make sure that you have a basic understanding of the sections that relate to the course modules. However, the course literature is mainly composed of research papers and reports that together with the lectures, exercises and project work will provide in-depth knowledge.

Example of additional literature included in the course.

- Daily et al. 2009: Ecosystem services in decision making - time to deliver. *Front Ecol Environ* 7:21-28.
- EU FP7 project Mediation, 2013: Decision support methods for climate change adaptation. Method overview. Summary of Methods and Case Study Examples from the MEDIATION project.
- Hallegatte S. 2009: Strategies to adapt to an uncertain climate change. *Global Environment Change* 19:240-247.
- Hou et al. 2013: Uncertainties in landscape analysis and ecosystem service assessments. *J. Env. Man.* 127:S117-S131.
- IPCC Working Group II Report "Climate Change 2014: Impacts, Adaptation, and Vulnerability"
- Lawler J. 2009: Climate change adaptation strategies for resource management and conservation planning. *Ann NY Acad Sci* 1162:79-98
- Littell et al. 2011: Managing uncertainty in climate-driven ecological models to inform adaptation to climate change. *Ecosphere* 2: 1-19
- Mace G., Norris K. and Fitter A. 2012. Biodiversity and ecosystem services: a multilayered relationship. *Trends in Ecology and Evolution* 27:19-26.
- Polasky et al. 2011: Decision-making under great uncertainty: environmental management in an era of global change. *Trends in Ecology and Evolution* 26:398-404
- Refsgaard et al. 2007: Uncertainty in the environmental modelling process - A framework and guidance. *Environmental Modelling & Software* 22:1543-1556
- Stein et al 2013: Preparing for and managing change: climate adaptation for biodiversity and ecosystems. *Front Ecol Environ* 11:502-210