EMS8/ECAC7 Abstracts, Vol. 5, EMS2008-A-00286, 2008 8th Annual Meeting of the EMS / 7th ECAC © Author(s) 2008



## Adaptation strategies to make Dutch nature climate change proof

M. Vonk (1), D.C.J. van der Hoek (1) and C.C. Vos (2)

(1) Netherlands Environmental Assessment Agency The Netherlands, (2) ALTERRA Wageningen University and Research Centre The Netherlands

Despite the implementation of mitigation strategies, climate change is taking place. Since climate is a key driving force for ecological processes, climate change is likely to exert considerable effects on ecosystems. Temperature rise will affect the potential range of habitats and species, while extreme weather events increase population fluctuations. Dutch nature areas are highly fragmented, and under heavy pressure of increasing economy and growth of human population. One of the major concerns is that nature can not adapt adequately and therefore current biodiversity conservation goals are under pressure. This calls for adaptation strategies in order to reduce the vulnerability of ecosystems to climate change and to make the policy for conservation ecosystems, climate change proof.

The first aim of this project was to identify the expected bottlenecks by climate change in the Dutch Natura 2000 areas and National ecological network. The assessment included both spatial and environmental conditions.

The second aim was to develop several options for adaptation:

- To develop larger and new nature areas in order to increase the resilience necessary to limit the risks of increasing population fluctuations because of weather extremes, and to increase spatial cohesion to create possibilities for species to reach new suitable habitats. Special interest is the international connectivity of nature areas with neighboring countries.
- To improve environmental conditions in habitats by (spatial)measures

For several ecosystems a 'map of adaptation' will be presented based on model studies, literature reviews and consultation of experts and stakeholders. These maps indicate which option(s) of adaptation have the most positive effect on conservation of biodiversity in the Netherlands.