
Count not what is lost but what is left

Chinese Proverb

Climate change and the effects on nature; the importance of good ecological corridors

Introduction

The climate is changing. Few people argue on that fact. That climate change affects nature is also commonly accepted and well documented.

The Millennium Ecosystems Assessment (MEA) states in its report about Ecosystems and Human Well Being (The Biodiversity Synthesis) that climate change is projected to exacerbate the loss of biodiversity and increase the risk of extinction for many species, especially those already at risk due to factors such as low population numbers, restricted or patchy habitats, and limited climatic ranges. Biodiversity is a key component of ecosystems without which many of the services these ecosystems provide would be lost to mankind.



The Intergovernmental Panel on Climate Change cited climate change as one of numerous pressures on the world's wildlife, which has led to some 25 per cent of the world's mammals and 12 per cent of birds being at significant risk of extinction. (IPCC, 2001)

The MEA also underlines the importance of good ecological corridors between large natural areas as a tool to counter the loss in biodiversity. These should allow species to be able to follow the climatic shift from the south to the north of Europe.

This fact sheet focuses on the importance of ecological corridors as a tool to adapt to and prepare for the effects of climate change. In our view the importance of good ecological corridors is not yet widely understood in many member states. It is a call for national and regional administrations to make haste with the planning and implementation of ecological corridors in order to meet the goal of halting the decline of biodiversity in 2010.

Why ecological corridors?

Both a rise in average temperatures and an increase of extreme weather conditions are putting pressure on biodiversity. Species are forced to move in order to find habitats that meet their requirements. The shift of habitats is going fast, about 400 km per century, e.g. 11 meters per day!

Ecological corridors can be essential for long-term survival of certain species. The ecological relations of the corridors can exist in air, in the water and on the ground. Their spatial scale can differ from local to continental and global. As the distance between suitable biotope sites increases, the number of species that can bridge this distance decreases. © ECNC/CoE, 2003

Due to habitat fragmentation alone many species in Western Europe have already disappeared or may disappear in the near future. In combination with climate change the risk of extinction is even greater.



It is therefore vitally important that habitats are linked through ecological corridors to facilitate dispersion. Ecological corridors and 'stepping stones' are essential for the long-term survival of species. Given the variations in movement capacity of different species, corridors have to be tailor-made and/or species-specific in order to function effectively.

The threats Eurasian cranes are facing are loss of wetlands and intensification of agriculture. Possible solutions are the protection and restoration of potential habitat in the breeding areas, the stop-over sites along the flight paths and the wintering areas which all function as migration stepping stones.

(ECNC, Alterra, 2004)

The Habitat Directive of the European Union (1992) acknowledges in Article 10 the importance of landscape elements that enhance connectivity and encourages member states to include corridors in their land-use planning and development policies. The Water Framework Directive (2000) requires the protection of pristine waters and the improvement of all other waters to a good ecological status in 2015, which will be a major contribution to the establishment of ecological corridors.

What should be done?

The importance of ecological corridors is formally recognised. However, not all countries are equally progressive on this point. In our view efforts should focus on the following priorities and perspectives.



- Raise awareness on the relationship between protected areas and ecological networks; both protected areas and corridors are important components of ecological networks.
- Clearly communicate the need for as well as the benefits and potential of an ecological network and ecosystem approach.
- Capitalize on the socio-economic benefits of protected areas and ecological networks and corridors and bring these benefits to local and regional communities.
- Ensure an ambitious implementation of the Water Framework Directive, specifically the development of national ecological classification systems which includes all biological elements such as fish fauna.
- Link protected area, ecological network and ecological corridor initiatives to major investment programmes and opportunities.
- When planning for the financing of Natura 2000, make full use of the funding opportunities existing under the different Community funds and ensure that investments in connectivity (e.g. building 'ecoducts') receive sufficient priority.
- NGO's should be treated as full partners in the process of planning the corridors. They have, or have access to, the information that is needed to plan the corridors in the right place.
- Full support should be given to the Commission's proposal for the INSPIRE Directive which will make it much easier to integrate ecological networks into other sectors such as spatial planning and transport by making full use of existing spatial data and information.
- Ensure that high quality and comprehensive Strategic Environmental Assessments are carried out and that the effects of plans and programmes on ecological networks are given sufficient weight.
- Expand and improve existing agri-environment schemes to help biodiversity and ecosystems meet the challenges of climate change at the landscape level.



It's in our hands!

With this factsheet we aim to give some food for thought. It should bring about a sense of urgency, that we need to be serious about stopping the decline of biodiversity and be proactive in our response to climate change.

When following the efforts of member states in achieving the goal of halting the loss of biodiversity by 2010, the EEB will give special attention to the efforts made for the establishment of ecological corridors.

We have less than 5 years to achieve this. That is very little time. But it can be done. Coordination, communication and cooperation together with sufficient means, realistic planning and the will to achieve something are the most important ingredients to succeed. Let us try to keep Europe's natural areas and ecosystems vital and diverse. **We will benefit!**

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