



Nationalpark  
Berchtesgaden



## INTERNATIONAL CONFERENCE

"Ecological network in the Alps - a response to climate change that will conserve biodiversity?"

Berchtesgaden/D  
15<sup>th</sup> - 16<sup>th</sup> October 2009

Number of module	Title of presentation	Name of chairman/Structure	Language of the presentation	Contact (telephone, email, etc...)	Supports/Tools (power point presentation, photos, etc...)	Language of the supports/tools
	Climate change and biodiversity		English	<a href="mailto:Oliver.schweiger@ufz.de">Oliver.schweiger@ufz.de</a>	Ppt	English

**SUMMARY of presentation (mains ideas developed in the language that you prefer) :**

## **Climate change and biodiversity**

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Climate change already affected all levels of biodiversity world wide and future consequences are projected to be even more severe. Such impacts occur at all organisational levels such as the individual level (e.g. changing behavioural patterns), the population genetic level (e.g. evolutionary change), the species level (e.g. changes in phenology or distributional range; or local or regional extinction), or the community level (e.g. changing composition and functioning). While direct effects of climate warming on particular species are increasingly well documented, knowledge about how species interactions are affected is still scarce. This is crucial because (i) differently affected interacting species and (ii) additionally acting drivers of global change such as land-use change or alien species are likely to further amplify negative effects of climate change for many species.

In this context, one topic of particular concern is the sustainable provision of ecosystem services on which human well being crucially depends. However, predictions about future ecosystem functioning and the provision of ecosystem services are still hard to make because of the highly complex nature of interacting species and drivers of global change. On the one hand, the dynamic and flexible architecture of interaction networks, such as e.g. plant-pollinator networks, provides a quite high amount of resilience against many types of changes. On the other hand, climate change can also facilitate particular species (e.g. alien species) that may partly compensate the loss of resources or services in the course of climate change.