

Thursday 02nd December 2010

Workshops related to session 2

16:00 - 18:00

[Parallel Workshop](#) related to Plenary session 2

Workshop
Water Stress and Biodiversity

Organizer:

- **Klement Tockner** and **Hans-Peter Grossard**, *Leibniz-Institute for Freshwater Ecology and Inland Fisheries, Berlin, Germany*

Freshwater ecosystems are a focal point for species richness and biogeochemical processes. While only 1 % of the earth's surface is covered with freshwaters, they provide the habitat for over 10 % of all animals and more than 35 % of all vertebrates (www.freshwaterbiodiversity.eu). At the same time, freshwater biodiversity declines much faster than biodiversity in terrestrial and marine ecosystems, which is mainly due to intensive anthropogenic pressure on freshwater ecosystems. Despite their pivotal ecological and economic importance, however, they have not been of primary concern in policy-making - although freshwater biodiversity has been identified to be of over-riding conservation priority during the International Decade for Action – 'Water for Life' – 2005 to 2015.

The use of the planet's water resources is closely linked to the global loss in biodiversity. A key challenge for future water management will be to allocating enough water for cities, agriculture, power production, and the ecosystem. Pivotal questions that evolve are: How much water does an ecosystem need to sustain its biodiversity and its key functions? Which biomes, ecosystems, and habitat types will be most affected by the expected massive changes in water resource availability? How much water should be assigned to anthropogenic use to minimize loss in biodiversity and essential ecosystem functions? And which management strategies are available and need to be developed for sustainable use of water resources for the actually competing users?

Here, we aim to stimulate discussions on emerging issues and to search for future management directions related to biodiversity loss in freshwater ecosystems.

Oral presentation 1: **Water stress: causes, stress and consequences**

[Petra Döll](#), Institute of Physical Geography, Goethe University, Frankfurt/Main, Germany

Oral presentation 2: **How much water does an ecosystem need to sustain its biodiversity and related ecosystem services?**

[Klement Tockner](#) and [Hans-Peter Grossart](#), Leibniz-Institute for Freshwater Ecology and Inland Fisheries, Berlin, Germany