Hydrological and biogeochemical processes in wetland ecosystems in relation to biodiversity restoration

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This special issue contains seven contributions which were originally presented at the international symposium 'Changing Wetlands' in Sheffield, U.K., organized jointly by the British Ecological Society and the Society of Wetland Scientists, 9–13 September 2001. The focus of the symposium as a whole was on environmental changes in wetland ecosystems and on opportunities for restoration of wetland systems in terms of their total area and of their floristic and faunal quality.

The contributions in this issue deal with restoration experiments in wetlands and specifically address hydrological and biogeochemical requirements for successful restoration, and the functioning of restored systems. The papers by Kemmers et al. (2003) and Kennedy et al. (2003) address the importance of

groundwater quality and level variation for the development of a typical rich-fen vegetation. Smolders et al. (2003) investigated the biogeochemical process enhancing successful re-establishment of *Sphagnum* vegetation in restored bogs. The CO₂ fluxes at the ecosystem scale in such bogs after restoration were studied by Petrone et al. (2003). Güsewell (2003) reports on mowing practices to control *Phragmites* invasion in species-rich fen meadows. Finally, Van Duijnen et al. (2003) point to the importance of habitat diversity in raised bogs as a major factor controlling the diversity of aquatic macro-invertebrates.

We hope that these papers are of interest to the readership of *Wetlands Ecology and Management* and will contribute to sound procedures for successful management and restoration of wetlands.