

TEMPORARY WATERS: BIODIVERSITY, FUNCTIONAL ECOLOGY, VULNERABILITY AND SUSCEPTIBILITY TO CLIMATE CHANGE

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Temporary waters contribute to regional diversity disproportionately compared to the Earth's surface they cover. This presentation i) describes the reasons underlying this biological diversity, ii) analyzes the importance of temporary waters as hotspots of biodiversity, iii) stresses how these ecosystems represent a valuable tool to evaluate the impact exerted by human activities on our Planet, and iv) consider the possibility to extend the principles of the Integrated Lake Basic Management developed by ILEC in order to achieve a sustainable management of these ecosystems. Moreover, temporary waters are strongly impacted by the climate change, which modifies their hydroperiod and reduces their spatial density. When these effects are coupled with direct destruction operated by human activities (they are hardly recognized as aquatic ecosystems with an extraordinary rich biodiversity) a large portion of species, whose life cycles are strictly dependent upon the temporary nature of these ecosystems, is endangered. To lower the risk of a significant decrease of biological diversity of inland waters, and to safeguard biodiversity at different spatial scales (e.g. local, regional, national) a sound management of the whole territory, addressed to preserve the existing and eventually to create new temporary ecosystems, can not be further delayed.

PRESENTATION TYPE: ORAL