

CONSERVATION AND WISE USE OF ESTONIAN WETLANDS

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The values of wetlands and the role wetland ecosystems play in maintaining biodiversity and environmental quality are widely accepted (Masing et al., 1990). The need for the conservation of wetlands is increasingly coupled with the recognition that wetlands provide services that are important welfare constituents. Nevertheless, the degradation and loss of wetlands were identified by the Millennium Ecosystem Assessment as being more rapid than that of other ecosystems. The promotion of the conservation and wise use of wetlands are therefore very relevant.

In Estonia, the area of wetlands has also diminished remarkably due to different utilization for economic needs. Comparatively large areas of natural wetlands have, however, been preserved and contribute significantly to environmental and biological diversity. Substantial progress has been achieved in the area of wetland conservation and a significant proportion of valuable wetlands (a total of 33 wetland habitat types covering more than 300,000 ha) are legally protected (Kimmel et al., 2010). All Special Protection Areas and 80% of Special Conservation Areas in the Natura 2000 network represent a lesser or greater amount of wetland habitats. Several wetland types, particularly mires (especially ombrotrophic bogs) and semi-natural wetlands (coastal and floodplain meadows), have been preserved in Estonia in considerably large numbers and in total area, providing habitats for a number of species threatened globally or on a European scale.

The Ramsar convention is promoting the wise use of all wetlands as a means of maintaining their “ecological character” – the ecosystem components and processes that comprise the wetland and underpin the delivery of ecosystem services (De Groot et al., 2006). The brief analysis indicates that Estonian wetlands provide the array of provisioning, regulating, cultural and supporting ecosystem services. Despite the compensation network, where legally protected areas are supplemented by areas included in the green network, ensuring this way the maintenance of the provision of the main wetland ecosystem services, there are still crucial challenges of wetland wise use in Estonia: 1. Management of drained wetland areas that have become the sources of greenhouse gases; 2. Achievement of the sustainable use of peat resources and ensuring of the restoration of cut-away peatlands; 3. Maintenance of the traditional management of valuable semi-natural wetlands. To this day, wetlands have often been treated from different viewpoints, depending on the interests of different disciplines or sectors. There is a challenge to integrate the ecosystem services framework, providing better possibilities to assess trade-offs among alternative scenarios of resource use, into wetland management planning. The valuation process, involving stake-holders and monetary valuation, could help raise awareness and encourage cross-sectoral co-operation.

References

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