



International Workshop:

AWARE: Approaches in Wetland Restoration - focus on fen landscapes

21-23 April 2013 Warsaw, Poland, 23-25 April 2013 - field workshop

International workshop "AWARE: Approaches to Wetland Restoration - the focus on fen landscapes" was held in Warsaw on 22-23 April, followed by an excursion and field-discussions in fens of NE Poland. The workshop was attended by more than 70 participants from 11 countries: scientists, students and representatives from nature protection agencies. The challenges in wetland restoration were discussed and several concluding statements were summarized below.

Submitted posters and some of the contributions summarized in Extended Abstracts are published on the workshop website. Click here to learn more www.biol.uw.edu.pl/aware

The Extended Abstracts will be also published in the SER Europe Knowledge Base on Ecological Restoration in Europe www.ser-europe.org



Photo 1: Flooded fens in Biebrza River valley

The focus of our workshop was on the restoration of wetlands in a broadly understood fen landscapes. These habitats host many characteristic and nowadays endangered plant and animal species. Fen landscapes have lost their ecosystem functions, which are vital for providing important services for society. Recently many restoration projects are initiated, focusing on different objectives. While natural landscapes used to provide multiple functions and biodiversity benefits, restoration of the degraded ones is intrinsically constrained by certain trade-offs.

Cost-effectiveness of restoration was discussed during the workshop and focused around the question: how to match intensity with expected outcomes? High investments should be made in those sites, which offer good potential for long-term preservation of biodiversity in possibly stable systems. Enhancement of ecosystem resilience is regarded a goal of ecological restoration. Currently, most fen restoration projects are oriented on short-term gains in rare species, while they do not account on long-term stability. In large areas, there might be more room for natural dynamics and wilderness-approach in restoration, while small areas will usually deserve higher intervention approach. A need for integrated landscape-approach in wetlands restoration was stressed.

Biodiversity and ecosystem services may require different approaches: multiple benefits, such as ecosystem services and provision of habitats for threatened species can be achieved to a certain extent, but there are trade-offs related to optimizing restoration strategies for such different targets. There are at least two ways of solving conflicts of interests: looking for compromises or setting priorities.

Photo 2: Experiments with different mowing intensities in Biebrza River valley.



Primum non-nocere: ecological restoration, as a science-based method of assisting degraded ecosystems in their natural recovery, should never be used as an excuse for damaging other sites. Conservation of existing biodiversity hotspots and remaining natural or semi-natural ecosystems should be of highest priority.

Photo 3: Field discussion at one of the study sites.

A '*Resolution on Polish Rivers*' was prepared. The participants expressed their concern about current situation of river management in Poland. Due to ecologically harmful actions many of smaller rivers have recently been brought under threat, which may decrease biodiversity and ecosystem services of riparian landscapes.

During the field part of the workshop we visited and discussed several examples of fen restoration projects in Central and North-East Poland. At partly degraded Całowanie Fen site we discussed various restoration methods that are being experimentally tested there since 2002. Measures, such as topsoil removal, hay transfer for species addition, shrub removal and ditch blocking were applied there, on different scales.

Photo 4: Visit at experimental restoration area Całowanie Fen.





Photo 5: Field discussion on mowing management in Biebrza River valley.

Several restoration projects in the Biebrza River valley were visited. This is a large complex of extensively used fens and marshes, protected in a national park and Natura 2000 site. We visited projects aiming at re-establishing natural water regimes in fen areas and river restoration. We also discussed some challenges and restoration trade-offs related to a re-establishment of low-intensity management and semi-natural open landscape. Restoration of a facilitated by biodiversity-oriented agri-environmental subsidies were addressed.

At a heavily degraded fen site Niecka Gródecko-Michałowska, where some experimental restoration is being carried out by the Polish Society for Bird Protection (PTOP), the restoration challenges because of ongoing peat extraction and drainage systems, as well as of re-introducing low intensity mowing management were discussed.



Photo 6: Challenges for restoration in degraded fens: large scale management and biomass removal the peat excavation site. All photos Agata Klimkowska ©

More information on the visited sites can be found on the workshops website.

