

ECOSYSTEM APPROACH IN MANAGEMENT: LIFE-BALTCOAST PROJECT - REHABILITATION OF THE BALTIC COASTAL LAGOON HABITAT COMPLEX

Murel Merivee¹, Riinu Rannap^{2,5}, Voldemar Rannap³, Hannes Pehlak⁴

¹Environmental Board, ²NGO Põhjakonn, ³Ministry of Environment, ⁴Estonian University of Life Sciences, ⁵FIBIR, Frontiers in Biodiversity Research Centre of Excellence

According to the Natura 2000 habitats directive, the coastal lagoon is a priority habitat type, which is characteristic of the coastal areas of Baltic Sea. Together with a number of natural and semi-natural surrounding habitats, it forms an extremely varied habitat complex with high biodiversity value. During the last decades, the whole coastal lagoon habitat complex has undergone considerable degradation both of quantity and of quality, losing its ecological character. Although the threats to coastal habitat complexes have been different in different countries: drainage, damming, fertilization, eutrofication, mismanagement, overgrowing etc, the result has still been the same – loss of biodiversity. Even if there are some remaining habitats still in good shape in Natura 2000 sites, the ecological network between the habitat complexes is impaired. Though large areas have been taken under management in the recent years due to the help of different agri-environmental schemes paid to the managers, such improvement in quantity hasn't always restored once lost biodiversity. The reason for this is that the management requirements only take into account the habitat type demands, but often look pass the needs of the ecosystem.

Despite several conservation efforts carried out in many countries around Baltic Sea, the conservation status of the coastal lagoon habitat complex is still not favourable and the species characteristic of this habitat complex are in decline. Therefore, an international LIFE-Nature Baltcoast project was launched to contribute significantly to a favourable conservation status of the coastal lagoon habitat complexes, seeing the coastal areas rather a system than a combination of separate habitat types. A number of species, belonging to the coastal lagoon habitat complex, such as wading birds: *Calidris alpina schinzii*, *Philomachus pugnax*, and *Recurvirostra avocetta* (Annex 1 of the Bird Directive); the amphibians: *Bufo viridis* and *Bufo calamita* (Annex 4 of the habitat directive), and *Apium repens* (annex 2 of the Habitats Directive), are threatened and/or declining.

The core aim of this project is to ensure the favourable conservation status of selected coastal lagoons and surrounding habitats in Denmark, Germany, Estonia and Lithuania. Swedish project sites will be reference areas for good management. Altogether 34 project areas have been selected, all located in Natura 2000 sites, comprising almost 20,000 ha and stretching over five countries bordering on the Baltic Sea. 35 partners from Germany, Denmark, Sweden, Estonia and Lithuania are involved in the project. During the project period 2005-2011, different activities have been implemented to improve the conservation status of selected project sites. In addition to this, the best management guideline for rehabilitation of coastal lagoon habitat complex for Baltic Sea region will be compiled. To prevent extinction of *Calidris alpina schinzii* and *Philomachus pugnax* in Baltic Sea coast of Denmark and in Estonia as well as in whole Baltic Sea region, an international network among wader birds' experts has been created to combine their knowledge and experience.

References

<http://www.life-baltcoast.eu>

Murel Merivee, *Project Coordinator, Environmental Board*; T:+37253022335; F:+3726272182; Narva mnt 7a, Tallinn; murel.merivee@keskkonnaamet.ee; www.keskkonnaamet.ee

Riinu Rannap, *PhD Member of the Board, NGO Põhjakonn; Researcher, FIBIR, Frontiers in Biodiversity Research Centre of Excellence*; T:+3725232732; riinu.rannap@ut.ee; www.ut.ee/lkb

Voldemar Rannap, *Project Coordinator, Ministry of Environment*; T:+37253411962; voldemar.rannap@envir.ee; www.envir.ee

Hannes Pehlak *MSc, Senior Laboratory Assistant, Estonian University of Life Sciences*;

T:+3725236077; hannes.pehlak@eesti.ee;

www.emu.ee