



marine protected areas
in the Eastern Baltic Sea



LIFE Nature project “Marine Protected Areas in the Eastern Baltic Sea”
Reference number: LIFE 05 NAT/LV/000100

**Executive summary: Action C3 – Assessment of the impact of
disturbances on waterbird and seal species of Community interest**
Action leader P13, Institute of Ecology of Vilnius University

Goal of the action

The main goal of this action was to assess the potential disturbance threat to waterbirds and seals posed by various human activities in the investigated project sites. Since the Baltic Sea areas under investigation can be characterised by rather intensive human activities, assessment of their potential disturbance effects on waterbirds and seals at different stages of their annual life cycle could not be overlooked. Such an assessment was also needed as an important input into nature management plans produced during this project.

Activities implemented

The assessment of disturbance impact from various economic activities in the project areas and adjacent areas on waterbirds and seals was implemented as a desk study without any special field investigations.

The assessment involved extensive literature review of the published information related to the effects of various disturbance sources (traffic, windmills, military training, noise pollution, recreation, etc.) on waterbirds and seals. Information on the existing and planned developments, which can be considered potential disturbance sources, in the project areas were collected from various, primarily official, sources – county authorities, municipalities, legislation and other legal documents, strategic, territorial and other plans, feasibility studies, environmental impact assessment reports.

Finally, the assessment of potential disturbance impact was carried out on site-by-site basis, comparing the available information on the existing/potential disturbance sources and their intensity, literature data on the effects of such disturbance factors, and the data on distribution/abundance of various waterbird species and seals in these sites, collected during the inventory actions of this project.

Results achieved

The main potential disturbance sources identified and assessed during this study included windmill parks, recreational activities (power boating, kiteboarding), fisheries (only the disturbance effect), shipping, military training activities, dredging/dumping. The thirteen project sites investigated differed considerably in terms of the variety and intensity of human activities that could be considered potential disturbance sources for waterbirds and seals. A map of all existing and potential sources of disturbance was produced for each project site along with an assessment of the importance of such impacts, their potential effect on different species and their

temporal distribution. For any potentially significant impacts site-based mitigation solutions were proposed.

Overall, with a few exceptions, potential disturbance impact from various human activities was assessed to be rather low, below the level that would warrant the need of their special regulation. Positive factor in this respect is the large size of most of the areas, favoured by birds, since this allows birds to safely avoid low intensity disturbance (shipping traffic, fishing boats, etc.). Recreational activities (kiteboarding and water scooters) were considered to pose significant disturbance threat to birds wintering in the West Coast of Gulf of Riga site, therefore a seasonal ban of these activities was proposed there. Military training activities were proposed to be regulated (both temporary and/or spatially) in Neringa site, because of their overlap with wintering waterbird aggregation areas. The importance of appropriate EIA procedures, with a special disturbance impact assessment component, was also stressed for all the future developments that can cause the disturbance threat for birds and seals.

Main lessons learned

The assessment of potential disturbance impact on waterbirds and seals is complicated by the fact that there is relatively little published information on the effects of various disturbance sources on wildlife, let alone waterbirds and seals in particular. Only the effect of windmills is more extensively studied, while the effect of military activities, recreation, shipping is still poorly studied and understood.