



**Interreg**

**Latvija-Lietuva**

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**Conservation of biodiversity in open wetland habitats of the  
LV-LT cross-border region applying urgent and long-term  
management measures**  
(Project LLI-306 Open landscape)

Activity T1.2 Assessment of diversity, distribution and status  
of open wetland habitats in pilot PAs of LT and LV

Deliverable T1.2.1

**Report on Open Wetland Habitats Diversity,  
Distribution and Status Assessment in LT and LV**

Extended Summary

Project partner PP\_2:

*Public Institution Nature Heritage Fund*

Project partner PP\_5:

*Nature Conservation Agency of Latvia*

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## **DIVERSITY, DISTRIBUTION AND STATUS ASSESSMENT OF OPEN WETLAND HABITATS IN STUDIED AREAS OF LITHUANIA AND LATVIA**

The aim of this study was to estimate the diversity of open wetland habitats applying the EUNIS and EU habitat classifications in selected areas of Lithuania and Latvia, to reveal the spatial distribution of the habitats, to evaluate their state, threats for their stability and to propose conservation measures.

According to the results of habitat inventory and mapping, open wetland habitats in Biržai Regional Park (hereafter – BRP) occupy 117.66 ha which comprise 0.82 % of the total area of the park. Habitat diversity in the BRP is low and all inventoried open wetland habitats belong to 3 types of the EUNIS classification. Wetland habitats of EU importance are absent in the territory.

The most frequent in BRP are reedbeds normally without free-standing water (D5.1 type). These habitats were inventoried in 38 sites and they occupy 77.71 ha or 66.05 % of all open wetland habitats in the territory. Habitats of beds of large sedges normally without free-standing water (D5.2 type) were inventoried in 18 sites and they occupy 27.99 ha or 23.79 % of all wetland habitats in BRP. Habitats of damaged, inactive bogs dominated by dense purple moorgrass (*Molinia*) (D1.121 type) were inventoried in two sites. These habitats occupy 11.86 ha or 10.16 % of the total area of open wetlands.

The state of open wetland habitats deteriorates because of the overgrowth by trees and shrubs, therefore, tree and shrub cutting combined with mowing of herbs are the most important measures in order to sustain these habitats and improve their state. Wetland habitats of moderate ecological value prevail (39 sites) in the territory of BRP and they occupy 97.02 ha, whereas habitats of low ecological value were revealed in 18 sites and they occupy 19.69 ha.

Analysis of collected data revealed, that 36 habitat sites (93.85 ha or 79.76 % of all open wetland habitats) have been drained and 22 sites (8.39 ha or 20.24 %) were without evident signs of the direct drainage or alterations of water regime. In the inventoried open wetland habitats of BRP, 11 alien species were registered and 4 of them are included in the list of invasive species of Lithuania.

Inventoried open wetland habitats of BRP are the most threatened by changes of species composition, which take place under the effect of multitude factors, which influence habitats directly and indirectly. Changes of species composition threaten 58 sites of the inventoried habitats.

Most of the inventoried habitats in BRP are of good ecological state and they comprise 43.63 % of the total open wetland habitat area. Habitats of unsatisfactory ecological state comprise 33.84 % of all wetland habitats, whereas 22.53 % of habitats were assigned to the group of satisfactory ecological state. However, more than half of habitats of beds of large sedges normally without free-standing water (D5.2 type), which are of comparatively higher value from the point of view of biodiversity, are of unsatisfactory ecological state.

According to the results of habitat inventory and mapping, open wetland habitats in Sartai Regional Park (hereafter – SRP) occupy 499.80 ha which comprise 4.12 % of the total area of the park. Habitat diversity in the SRP is quite high and all inventoried open wetland habitats belong to 6 types of the EUNIS classification.

Reedbeds normally without free-standing water (D5.1 type) are the most frequent in SRP. These habitats were inventoried in 64 sites and they occupy 217.94 ha or 43.61 % of all open wetland habitats in the territory. Habitats of transition mires and quaking bogs (D2.3 type) were inventoried in 26 sites. These habitats occupy 126.95 ha or 25.40 % of the total area of open wetlands. Habitats of beds of large sedges normally without free-standing water (D5.2 type) were inventoried in 23 sites and they occupy 53.30 ha or 10.66 % of all wetland habitats in SRP.

In SRP, like in BRP, the state of open wetland habitats deteriorates because of the overgrowth by trees and shrubs. Thus, tree and shrub cutting combined with mowing of herbs are the most important measures in order to sustain these habitats and improve their state. Wetland habitats of moderate ecological value prevail (97 sites) in the territory of SRP and they occupy 398.49 ha. Habitats of high ecological value were inventoried in 20 sites which occupy 93.67 ha. Habitats of very high ecological value were registered in 4 sites and they occupy 5.39 ha.

Analysis of collected data revealed, that 48 habitat sites (300.08 ha or 60.04 % of all open wetland habitats) have been drained in SRP and 76 sites (199.74 ha or 39.96 %) were without evident signs of the direct drainage or alterations of water regime. In the inventoried open wetland habitats of SRP, 7 alien species were registered and 5 of them are included in the list of invasive species of Lithuania.

For 117 sites of the inventoried open wetland habitats of SRP the most serious threat rises because of changes of species composition. These changes take place because of various factors, which influence habitats directly and indirectly.

Most of the inventoried habitats in SRP are of unsatisfactory ecological state and they comprise 50.05 % of the total open wetland habitat area. Habitats of good ecological state comprise 26.04 % of all wetland habitats, whereas 23.91 % of habitats were assigned to the

group of satisfactory ecological state. Habitats of transition mires and quaking bogs (D2.3 type), which are of the highest value from the point of view of biodiversity, are of satisfactory ecological state.

Quite different situation with open wetland habitats was revealed in the selected areas for implementation of current project in Latvia. Wetland of Lake Pelēču (Pelēču ezera purvs; hereafter – WLP) situated in Preiļi municipality occupies 11.40 ha and the whole area is occupied by single transition mire and quaking bog habitat type (D2.3 type according the EUNIS classification, 7140 according the EU classification). Entire area of WLP is of high ecological value; however, the ecological state is satisfactory. The main threat for this habitat type is its overgrowth by shrubs and trees as well as accumulation of dead plant remnants above the moss cover. Conservation and maintenance of favourable conditions in the area of WLP should be ensured by implementing habitat management measures.

The total area of the Wetland of Supe (Supes purvs; hereafter – WS) situated in Viesīte municipality comprise 712.00 ha, however, inventory of the area revealed, that open wetland habitats occupy 348.64 ha or 48.97 %. Three inventoried open wetland habitat sites belong to single habitat type – active, relatively undamaged raised bogs (D1.11 type according to the EUNIS classification, 7110 according the EU classification). All open habitats are of high ecological value in WS and their state was estimated as satisfactory. The main threat for active raised bog habitats is overgrowth of open areas by trees and shrubs and subsequent changes of species diversity mainly caused by changes of hydrological regime. Active management measures are required for conservation of open wetland habitats in WS.