

Introduction

The **Lake Burtnieks Meadows** Nature Reserve (area code 5327) was established in 2004 (CM Regulation No. 266/ 08.04.2004), and it covers an area of 432 ha. The reserve was established to preserve Annex I habitats 6450 Northern Boreal alluvial meadows of the EC Habitats Directive and the Annex I species the Great Snipe *Gallinago media* and the Corncrake *Crex crex* of the Birds Directive. The nature reserve encompasses last open meadows on the banks of Lake Burtnieks, and in the floodplains of the Briede and Eikīnupe Rivers. The nature reserve is located within the North Vidzeme Biosphere Reserve.

Following the criteria of both the Birds and the Habitats Directives, the nature reserve has been listed as a Natura 2000 site. Borders of the reserve overlap with those of the Burtnieki Meadows Special Bird Area (code LV083).

Most of the land that the reserve is situated on belongs to either private owners, legal entities or the Burtnieki Parish Council.

The management plan has been developed as part of the project LIFE04NAT/LV/000198 Restoration of Latvian Floodplains for EU Priority Species and Habitats in collaboration with the GEF/UNDP project Protection of biodiversity in the North Vidzeme Biosphere Reserve. The management plan is developed by the Latvian Fund for Nature, and in compliance with the Ministry of the Environment Order No. 120/04.07.2002 on Recommendations for Drawing Management Plans.

The following inventories took place in the process of drawing the management plan:

- Habitats of Annexes I and plant species of Annex II of the Habitats Directive (Inese Silamiķele);
- Specially protected habitats and plant species (Inese Silamiķele);
- Forests (Antra Strautniece);
- Invertebrates (dragonflies - Sarmīte Ingberga-Petrovska, butterflies - Nikolajs Savenkovs, aquatic invertebrates - Agnija Skuja);
- Bird counts (Ainārs Auniņš).

Baiba Strazdiņa was cartography expert; consultations on preservation of limestone outcrops were given by Dr. Ivars Strautnieks; development of the management plan was supervised and the document was edited by Liene Salmiņa.

To mark the inception of the management plan development, a meeting was called in the Burtnieki parish on 28 January 2005. The meeting was attended by 17 stakeholders (see Annex I). A survey was carried out during the meeting (see Annex I), which demonstrated that in the future all owners would be interested to manage their meadows even though some do not perform any activities there at this time. One of the surveyed owners would prefer to lease the land. In total, 9 respondents were surveyed.

The following members of the supervisory board were appointed during the meeting: Gundega Freimane, Deputy Head of the Species and Habitats Section, the Nature Protection Board; Ainārs Auniņš, Eastern Latvia Regional Coordinator for the LIFE-Nature project Restoration of Floodplain Meadows, the Latvian Fund for Nature; Dainis Ozols, Geologist, the North Vidzeme Biosphere Reserve, Uldis Balodis, Head of the Nature Protection Division, Valmiera Regional Environmental Board, the State Environment Service; Māris Rika, Head of the Burtnieki Parish Council, Lita Ozerinska, Accountant of the Burtnieki Parish Council, Jānis Jurašs, Manager of the Burtnieki Stud-farm, Ltd.; Dzidra Grīnberga, representing local inhabitants of the Burtnieki Parish, Ainārs Loks, Head of the 3rd Mazsalaca district,

West Vidzeme Forest District, State Joint Stock Company (SJSC) Latvian State Forests; Māris Rušiņš, Head of the 4th Rūjiena district, West Vidzeme Forest District, SJSC Latvian State Forests; Guntars Kampernovs, Head of the 7th Valmiera district, West Vidzeme Forest District, SJSC Latvian State Forests; Kaspars Beriņš environmental protection engineer, Valmiera Regional Forest District, the State Forest Service; Madars Zariņš, forest warden, Rencēni Forest District, Valmiera Regional Forest District; the State Forest Service.

The first meeting of the supervisory board took place on 26 September 2005; the project manager for development of the management plan introduced participants to the nature values of the nature reserve, and encouraged a discussion on activities necessary for the preservation of these values (see Annex III). The second meeting of the supervisory board took place on 31 October 2005; its main purpose was to discuss the potential zoning of the nature reserve, and to review the draft individual regulations for protection and utilization of the area. The public information meeting on the management plan took place on 23 January 2006, which resulted in several recommendations for potential changes in the management plan (see Annex IV).

The completion of the management was approved at the last meeting of the supervisory board, which took place on 17 February 2006 (see Annex VI). The Burtnieki Parish Council endorsed the plan on 23 February 2006 (see Annex V).

Summary

The **Lake Burtnieks Meadows** Nature Reserve was established in 2004 and it covers 432 ha of land. The nature reserve extends along the banks of Lake Burtnieks and measures approximately 100 – 500m in width; from the Santupīte River mouth to the Seda River mouth the border of the reserve is broken only in one site opposite the Burtnieki village. The nature reserve comprises last preserved river floodplain meadows that are favored for nesting and feeding by many bird species including such specially protected species as the great snipe, the corn crane and the short-eared owl.

Due to the location of the nature reserve on the banks of Lake Burtnieks, the territory also serves as an important recreation zone; it offers easy access to Lake Burtnieks which itself is not included in the reserve. The nature reserve already hosts a boat rental facility Ezerpriedes, and two sites there are used for bathing.

Traditionally, Lake Burtnieks has been a attractive recreation site for swimming, boating and angling; it is inevitable that in the future the recreation pressure on the site will only increase. Hence, it is important to develop a balanced and adequate zoning of the nature reserve to ensure conservation of nature values and to meet the recreation needs around Lake Burtnieks. The nature reserve has two zones: the nature reserve zone and the nature park zone. The latter has been established in those parts of the reserve where infrastructure for nature-friendly recreation is permitted and even required.

Long-term or the ideal objective set for the management of the site would be achieved when the landscape in the reserve is dominated by open floodplain meadows, with presence of lakeshore reeds, ox-bows, and forests on slopes, along with nature-friendly tourism and recreation practiced here.

The biological value of the territory is demonstrated by the fact that it is listed as a Natura 2000 site. There are 7 habitats found in the Habitats Directive Annex I registered in the nature reserve, and those include 6450 Northern Boreal alluvial meadows, 6210 semi-natural dry grasslands on calcareous substrates, 6410 *Molinia* meadows on calcareous, peaty or clayey-silt laden soils, 3150 natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation, 9180* Tilio-Acerion forests of slopes, screes and ravines, 8220 siliceous rocky slopes with chasmophytic vegetation, and 7160 Fennoscandian mineral-rich springs and springfens. Seven specially protected bird species (five of those are listed in Annex I of the Birds Directive), and one specially protected invertebrates species have been found in the site. Habitats found in the nature reserve are suitable for 9 specially protected invertebrates species; 5 of those species are listed in Annex II of the Habitats Directive.

Nature conservation priorities for the nature reserve have been established taking into account the frequency of the specially protected habitats and species in the country and elsewhere in Europe. The highest priority is given to species and habitats that are either rare or locally positioned in Latvia, or are annexed in the Birds and Habitats directives. Those include the following:

- Birds nesting in meadows, in particular the corncrake and the great snipe,
- River floodplain meadows,
- Limestone outcrops.

Preservation of nature values has been negatively affected by termination of management and changes in river and lake hydrology. Hence, the management plan prescribes the following priority management activities: clearing bushes from the

floodplain meadows, grazing or mowing of the meadows, and raising public awareness on the issue. One of the major and most positive factors that foster conservation of nature values is the availability of subsidies from the Rural Support Service; the money is available to landowners for management of biologically valuable grasslands. That was the key reason for reestablishing the necessary management practices for the meadows, and a trigger for the Burtnieki Parish Council to collaborate with two projects - the LIFE04NAT/LV/000198 project on Restoration of Floodplain Meadows for European Union's species and habitats (2004-2008) administered by the Latvian Fund for Nature (LFN), and the UNDP/GEF project on Preservation of Biodiversity in the North Vidzeme Biosphere Reserve (2004-2008). As a result of this collaboration the landowners are able to sign contracts with the LFN, and obtain co-financing from the LIFE-Nature project for clearing bushes and restoring fences. Together with the UNDP/GEF project the site will soon have information boards and signage, a nature trail, and an observation tower near Ēķīnupe.