## Introduction

The **Sita and Pededze Floodplain** Nature Reserve (area code 5320) was established in 2004 (CM Regulation No. 266/ 08.04.2004), and it covers an area of 870 ha. The reserve was established to preserve Annex I habitats 6450 Northern Boreal alluvial meadows, 6510 lowland hay meadows, 6270\* Fennoscandian species-rich dry to mesic grasslands, 6530\* Fennoscandian woodland meadows, and 91F0 riparian mixed broadleaf forests on river banks of the EC Habitats Directive; Annex II invertebrate species the hermit beetle *Osmoderma eremita* of the same Directive, and the corncrake *Crex crex*, the great snipe *Gallinago media*, and other 21 bird species listed in Annex I of the Birds Directive.

Following the criteria of both the Birds and the Habitats Directives, the nature reserve has been listed as a Natura 2000 site. Together with the Mugurve Meadows Nature Reserve they form the Sita and Pededze Floodplain Special Bird Area (code LV055).

Most of the land that the reserve is situation on is either private land or that of the Sita Nature Park, Ltd.

The management plan has been developed as part of the project LIFE04NAT/LV/000198 Restoration of Latvian Floodplains for EU Priority Species and Habitats. 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 (Lelde Engele);
- Specially protected habitats and plant species (Lelde Eņģele);
- River habitats and freshwater invertebrates (Mārtiņš Kalniņš);
- Woodland key habitats (Nikolajs Brīvība);
- Terrestrial invertebrates (Kristaps Vilks);
- Bird counts (Aivars Petriņš, Ainārs Auniņš).

Baiba Strazdiņa was cartography expert; 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 Litene parish on 14 February 2005. The meeting was attended by 25 stakeholders (see Annex I). A survey was carried our 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. In total, 10 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; Gunārs Ciglis, Head of the Litene Parish Council; Irēna Začeva, Spatial Planner, the Kubuli Parish Council; Aija Supe, Nature Protections Inspector, Madona Regional Environmental Board, State Environment Service; Andris Zelčs, Head of Nature Protections Unit, Rēzekne Regional Environmental Board, State Environment Service; Maija Ārente, Environmental Expert, North Latgale Forest District, State Joint Stock Company Latvia's State Forests; Ilgvars Jačuks, Forest Warden, Litene Forest District, Gulbene Regional Forest District, State Forest Service; Santa Zelča, Forest Warden, Stradi Forest District, Gulbene Regional

Forest District, State Forest Service; Ainārs Auniņš, Coordinator for the LIFE-Nature project Restoration of Floodplain meadows, the Latvian Fund for Nature;

The first meeting of the supervisory board took place on 30 August 2005 in the Litene parish and it was attended by 15 people (see Annex II). The second meeting of the supervisory board took place on 19 October 2005, and it gathered 14 participants (see Annex III). To discuss forest management within the nature reserve, all of the landowners were invited to attend the second board meeting. The public information meeting on the management plan took place on 25 November 2005, and it was attended by 21 people (see Annex IV).

The management plan was approved by the Litene Parish Council on 30 November 2005 and the Kubuli Parish Council on 9 January 2006 (see Annexes V and VI). The management plan was approved by the supervisory board during its last meeting on 20 December 2005 (see Annex VII).

## Summary

The nature reserve was established in 2004; it covers 870 ha of land and encompasses a part of the Pededze River valley. Together with the Mugurve Meadows Nature Reserve and the Lower Reaches of the Pededze River Nature Reserve it forms a unified hydrological system; natural processes there are highly dependent on appropriate functioning of the Pededze River and its tributaries.

The nature reserve is one of five best nesting grounds for the great snipe in Latvia; it hosts about 1% of the entire species population in the country. The Pededze River valley as a whole is one of the sites hosting the biggest population of the hermit beetle in Latvia.

Nature conservation priorities for the nature reserve have been established taking into account the frequency of 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 (typical for the East Latvia Lowland), or are annexed in the Birds and Habitats directives. Those include the following:

- Birds nesting in meadows,
- River floodplain meadows,
- ➢ Woodland meadows,
- $\succ$  Hermit beetle,
- ➢ Broadleaf forests,
- Individual old oak trees.

The biological value of the territory is demonstrated by the fact that it is listed as a Natura 2000 site. There are 11 habitats found in the Habitats Directive Annex I and 5 invertebrate species found in the Habitats Directive Annex II registered in the nature reserve; additionally, there is one mammal species of Annex IV of the Habitats Directive, and 23 bird species of Annex I of the Birds Directive.

The reserve also hosts 42 specially protected species in Latvia: 7 plant and 3 lichen species, 8 invertebrates, 23 bird and one mammal species. The nature reserve has 12.2 ha of woodland key habitats, and 6 types of specially protected habitats in Latvia.

The hydrological regime of the reserve and subsequently the continuity of its nature values was negatively affected by digging the Sita River bed and amelioration in and around the reserve in the mid and late 20<sup>th</sup> century; negative impacts can also be attributed to the hydro-power station (HPS) on the Pededze River, which was built in the Jaunanna parish in 2001. Meadow and meadow species have been negatively affected by discontinuation of management practices at the end of last century.

Reestablishing management of the meadows has been fostered by the availability of subsidies from the Rural Support Service's program for Preservation of Biodiversity in Grasslands. Activities carried out in the framework of the project for Restoration of Floodplain Meadows in Latvia have also triggered landowners' interest in meadow management. Most sites of the Sita and Pededze Nature Reserve have been mown this year; meadows and individually growing oak trees are being cleared of bushes and small trees. These activities are financed by the LIFE-Nature project LIFE04NAT/LV/000198 Restoration of Latvian Floodplains for EU Priority Species and Habitats.

The management plan prescribes the following priority management activities: mowing or grazing of meadows located with the nature reserve, counting of protected birds nesting in the meadows, and public awareness raising activities. The 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 woodland meadows, old broadleaf forests, individually situated old oak trees and specially protected plant and animal species; sustainability of meadow management would also be indicated by the landowners' willingness to engage in management activities.

It is recommended to include in the nature reserve the open floodplain meadows on the right bank of the Makstinupe River (16.4 ha) found within the Litene parish, and on the left bank of the Sita River (12.7ha) located with the Kubuli parish (see Annex 7). The recommended areas host the same vegetation as the reserve, and they are a part of the set of meadows that is currently being managed. Both landowners have agreed that areas depicted on the map are included in the nature reserve.