

## Introduction

The **Kalnciems Meadows** Nature Reserve is situated in the Valgunde parish of the Jelgava District and within the Kalnciems town (see image 1.1.4 on page 11). The reserve that covers an area of 170 ha was established in 2004, and has been designated as a Natura 2000 site. The management plan (MP) was developed in 2005 by the Latvian Fund for Nature with financing from the EU LIFE-Nature project LIFE04NAT/LV/000198 Restoration of Latvian Floodplains for EU Priority Species. The document was drawn in compliance with the Ministry of Environmental Protection and Regional Development (now - Ministry of the Environment) Order No. 120 from 04.07.2002 on Recommendations for Drawing Management Plans.

Additional survey was carried out during development of the plan; particular attention was paid to nature values of the site and the necessary management. Various experts took part in drawing the management plan: Ilze Čakare (plant species and habitats), Viesturs Vintulis (ornithology), Kristaps Vilks (invertebrates), Kārlis Lapiņš (cartography and GIS). Development of the plan was supervised and the document was written by Viesturs Vintulis.

The main task for the management plan was to seek balance between nature protection and area management requirements in order to ensure protection of the habitats of EU importance and their restoration in the overgrown parts of the meadows. Nature conservation requirements served as a primary point of reference for setting management activities. Cartographic material included in the plan (a satellite map of Latvia and an orto-photo from 2004) is the property of the Ķemeri National Park. Maps and area calculations were prepared using *Arc View GIS 9.0*.

Inception of the management plan was marked by an information meeting on 7 March 2005 held in the Kalnciems Social Hall; the gathered stakeholders could learn more about the LIFE-Nature project on Restoration of Floodplain Meadows, and about the planned development of the management plan. According to the Ministry of Environmental Protection and Regional Development (now - Ministry of the Environment) Order No. 120, a supervisory board for the management plan was established at the end of the meeting. Officer of the Nature Protection Board, Laura Nosova, appointed representatives from the Valgunde Parish, the Town of Kalnciems, the Jelgava Regional Environmental Board, the Latvian Fund for Nature and several local landowners.

In the course of developing the plan, two supervisory board meetings took place: on 10 July and on 20 October, respectively. At these meetings experts working on the plan introduced their progress, and received recommendations for amendments from the supervisory board members. Minutes of the meetings along with the notification of establishing the supervisory board are found in Annex 7. A public hearing for the 1<sup>st</sup> draft of the management plan took place on 10 November in the Kalnciems Social Hall. At the meeting experts were given input for fine-tuning the text and were recommended to broaden the range of management actions permitted within the reserve. Answers to the recommendations and suggestions are found in Annex 8.

The management plan was reviewed and approved by the Kalnciems Town Council during a meeting on 28.11.2005.); it was also reviewed at the meeting of the Valgunde Parish Council held on 12.01.2006 (see Annex 9), yet the final approval was

not reached due to objections raised by the landowner, P. Grube. The final meeting of the Supervisory Board took place on 20 December; it was used to review recommendations of P. Grube, and outcomes are found in Annex 10.

## Summary

The Kalnciems Meadows Nature Reserve is situated in the Valgunde parish and within the Kalnciems town of the Jelgava district (see image 1.1.4 on page 11). The reserve that covers an area of 170 ha was established in 2004 for the purpose of preserving rare and protected meadow habitats, and protected plant, animal and, in particular, bird species. Based on the inventory data gathered in 2003 in the framework of the EMERALD/Natura 2000 protected territories, the area has been designated as a Natura 2000 site.

The Kalnciems meadows is one of the best remaining unchanged stretches of the Lielupe floodplain meadows that still has natural processes driven by flooding in place. Part of the reserve is situated in a floodplain that is spilt by a dam (the Vecbērze polder). The reserve is dominated by meadow habitats, which partially have been taken over by shrubs due to a lack of management. The site hosts 3 protected habitats of European importance: 6270\* Fennoscandian species-rich dry to mesic grasslands (3.6%), 6450 Northern Boreal alluvial meadows (54.3%), and 6510 lowland hay meadows (2.1%). Habitat map is found in Annex 4. There is a relatively high diversity of flora: at least 130 vascular plant species have been registered here; it is a good indicator for meadow habitats (the list of plants registered in the reserve is available in Annex 5). Five specially protected plant species are found in the reserve; the Kalnciems meadows boast one of the most important sites for the shingled gladiolus *Gladiolus imbricatus* L. The reserve also hosts at least 77 bird species, and 23 of those (30%) are listed as specially protected species in Latvia and/or found in Annex I of the EU Birds Directive. The globally threatened corncrake, the common redshank, and the black-tailed godwit, among others, are all found here. Existing information was compiled and additional survey of biological values carried out as part of developing the management plan.

The management plan has been drawn for ten years (until 2015). The plan contains comprehensive information on the values of the territory and descriptions of the best management activities suited for reaching the objectives of the site; the established objectives for protection and management reflect both nature and socio-economic values of the area.

The following are the long-term goals for protection and management of the site:

- preservation and maintenance of rare and protected plant and animal species at no lesser rate than found after the 2005 inventory, and of habitats (meadows in particular) at their present or improved status,
- regular management of the area to maintain a favorable condition of meadow habitats; landowners/managers economically benefit from management of the site,
- control of anthropogenic (mostly visitors) pressure; it should be diverted to certain localities and controlled in peak seasons.

Short-term goals described in chapter 3.2 are based on the long-term goals; management actions required for reaching the goals are described in chapter 4. As the particular site is small and rather uniform and the management actions mainly include mowing and removal of shrubs and young trees, the area was not divided in functional zones; it does not have individual regulations for management and utilization.