

LIFE Project LIFE16NAT/LV/000262
GrassLIFE: Restoring EU priority grasslands and
promoting their multiple use

After-LIFE Conservation Plan



Latvian Fund for Nature
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Abbreviations

AB – Associated beneficiary

CAP – Common Agricultural Policy

EEB – European Environmental Bureau

GPPP – Green Public Procurement Plan

IES – Institute for Environmental Solutions, project partner

KPI – Key Performance indicators

Krastiņi – farm “Krastiņi”, project demonstration farm “Bekas”, project partner

LU – University of Latvia, Faculty of Geography and Earth Sciences, project partner

MoA – Ministry of Agriculture

MoE – Ministry of Environmental Protection and Regional Development

NCA – Nature Conservation Agency

RDP – Rural Development Programme

SES – State Environmental service

ST – Study Tour

Project data

The project deals with five priority grassland habitats - 6120* Xeric and calcareous grasslands, 6210* Semi-natural dry grasslands and scrubland facies on calcareous substrates, important orchid sites, 6230* Species-rich *Nardus* grasslands, on siliceous substrates, 6270* Fennoscandian lowland species-rich dry to mesic grasslands, and 6530* Fennoscandian wooded meadows. All those habitats are in “bad/unfavourable and declining” (U2-) conservation status in Latvia and in the EU. Latvia holds significant proportions of the project target habitats in the Boreal Biogeographic region, i.e. 47% for 6120*, 18% for 6530*, 12% for 6270* and 11.5% for 6210*.

The main reasons for deterioration and disappearance of those habitats are intensification of farming leading to cultivation or conversion of grasslands into arable lands, abandonment of those grasslands that are more difficult to manage and inappropriate management methods that leads to gradual loss of habitat quality. To tackle the above problems, GrassLIFE is focusing on restoration of grasslands and improving their management practices. Restoration activities are held in 18 Natura 2000 sites in Latvia that are important grassland sites.

The specific project objectives are as follows:

1. To **restore habitats and improve the conservation status on 1320.5 hectares** of EU priority habitats 6120*, 6210*, 6230*, 6270*, and 6530*, by applying best-practice and testing pilot and restoration methods.
2. To **establish a long term sustainable management (grazing) system** on the restored priority grassland areas, integrate them into farming practices and set up the mobile grazing units.
3. To **prepare the recommendations for improving the conservation status and grassland connectivity** by assessing the coverage and quality of priority grasslands in Natura 2000 network in Latvia, preparing recommendations for RDP and identifying the “hotspots” for restoration and protection measures.
4. To **demonstrate and share the knowledge** on priority grassland restoration by processing, analysing and distributing the information via networking actions and GrassLIFE demonstration farm.
5. To **improve economical perspective of sustainable grassland use** by identifying and marketing the grassland-products with high added value, alternative options of agricultural or non-agricultural use of priority grasslands and their services.
6. To **improve the knowledge and public awareness** about the importance of preservation of priority grasslands in Latvia and EU, with focus on ecosystem services, by undertaking nation-wide campaigns on grasslands and applying the citizen science concept to grassland monitoring.

The main project outcome:

1. Restoration measures has been applied to 1391 hectares of EU habitats. 781 ha of them are located on the project partner’s farms and on land under long-term management of LFN, but 610 ha have been restored by mobile grazing herds of the project. 1280 ha (92%) of these sites correspond to six priority EU priority grassland habitats (1630*, 6120*, 6210*, 6230*, 6270*, and 6530*). Others are other EU grassland and fen habitats, located in the priority habitat inclusions. 1363 ha (98%) of restored habitats

are located on 18 Natura 2000 sites, but 27.3 ha of the mobile grazing sites are adjacent to project sites or are important to ensure the EU habitat's connectivity. 84% or 1171 ha of restored locations corresponded to the EU habitat quality requirements at the project end. 219 ha of restored locations where intensive restoration measures have been done during the last project years and the sites where EU grassland habitat creation has been done still do not meet the minimum requirements of EU grassland habitats. Still, all necessary restoration measures have been done there and only the time and regular management are needed for these locations to reach the minimum habitat quality requirements.

2. Innovative/pilot grassland restoration methods have been tested on 356,7 ha, not including sites restored by innovative habitat restoration and management approach in Latvia (mobile grazing).
3. Long-term sustainable management systems have been established on 837 ha of restored habitats, significantly contributing to their maintenance. On most of those sites (773 ha), permanent grazing infrastructure has been set up, helping to integrate them into the daily farming practices of project partner farms.
4. Restorative grazing and long-term sustainable grazing management have been ensured for 610 ha EU grassland habitats, located on sites with management difficulties.
5. Recommendations for improving the conservation status and EU grassland connectivity have been prepared and submitted to the Ministry of Environment, identifying the "hotspots" for restoration and site designation.
6. The demonstration farm has been established, and 145 demonstration events have been conducted during the project implementation.
7. The GrassLIFE knowledge has been shared within 114 networking events.
8. 127 restoration plans have been produced and compiled into 15 farm-level restoration plans, and 7 business analyses have been performed.
9. The economics study focusing on grasslands, biodiversity and business has been conducted, identifying and promoting 8 grassland-related business products with high added value.
10. The communication plan has been produced and implemented. It allowed the project to reach a large audience and share the GrassLIFE messages among different stakeholders.
11. Four nationwide awareness-raising campaigns and 12 regional events were very successfully implemented. According to the media monitoring data, the outreach of communications activities in media and social media is more than 4.5 million.
12. Three citizen science campaigns have been conducted to involve the general public and school kids in the preservation and research of EU grassland habitats.
13. A Replication strategy has been produced and successfully implemented, ensuring that the most successful project methods are used in other projects and initiatives in Latvia. Three expert platforms have been hosted to share the GrassLIFE messages among professionals who work with habitat conservation, restoration and preservation.
14. A proposal for Agri-environmental measures related to the conservation of project target habitats for integration into the 2021-2027 RDP of Latvia has been prepared and submitted to the Ministry of Agriculture.

AfterLIFE

Goals of After LIFE plan

In order to ensure the continuity of the project activities and the sustainability of its achievements, the After-LIFE plan has the following objectives:

- To ensure long-term sustainable management of grasslands restored within the project in order to sustain and increase the quality of grasslands, including continuation of grazing in the project areas.
- To promote and spread further the knowledge on grassland management accumulated during the project – both scientific researches and practical approaches.
- To continue to raise awareness of the importance of grasslands and to further develop the ideas of sustainable use of grasslands.

ACTION A.1. Collection of pre-restoration data

The data collected during the pre-restoration period will serve as a baseline for future restoration activities in the project territories.

ACTION A.2. Technical planning – restoration plans and farm management plans

The Habitat restoration plans for 127 habitat plots across 12 farms were elaborated for an 8 to 10-year period and are actively being used after the end of the project. As they were agreed with the NCA, they are used as permission to continue the started habitat restoration works without losing subsidies, even if the activities to be carried out conflict with the general conditions for receiving subsidies set by the RDP for Latvia.

To get more information on possibilities to increase the grassland-based farm profitability in Latvia and to prepare more objective recommendations based on analyses of a larger number of farms, cooperation with *Nethergill Associate* will be continued in the GrassLIFE2 project, and more farms will be analysed by “Less is More” approach.

Implementation costs for this action are not foreseen as the Habitat restoration plans were financed fully within GrassLIFE, but the analysis of farms by “Less is More” approach will be covered by GrassLIFE2.

ACTION A.3. Communication with stakeholders, procurements and permits

Guidance for Green Procurement will serve as best practice example for other projects and LFN activities in general in order to strengthen green procurement and set higher standards for that.

The LFN actively uses the GrassLIFE stakeholder database in planning new grassland restoration initiatives and for dissemination of information related to grassland management, protection and restoration. For example, four of the GrassLIFE2 partners were approached thanks to their records in the GrassLIFE stakeholder database.

Thanks to the GrassLIFE work with stakeholders, it became clear that there is a lack of such an information and consultation service in Latvia. To fill the gap, the Help Desk activity was

included in the GrassLIFE2 proposal and successfully initiated consultation work will be continued within GrassLIFE2.

Implementation costs for further development of stakeholder database are covered by GrassLIFE2.

ACTION A.4. Communication plan

The Communication strategy developed in GrassLIFE has turned out to be a more overarching strategy for grassland communication and positioning, and the main messages developed during the strategy process are used by LFN in grassland related context in general, and in the other grassland projects undertaken by LFN.

Inspired by the success of GrassLIFE Communication, the Strategic communication approach has been replicated in WoodMeadowLIFE, LIFE MarshMeadow, LFN4GD, and LIFE LatViaNature projects.

The use of the strategic communication approach in other projects is covered by the budget of these projects.

ACTION A.5. Grassland connectivity model

The Grassland connectivity model was developed to evaluate the connectivity of Latvian grassland habitats, identify the most critical sites for habitat restoration, and obtain data on the most valuable habitats from a connectivity perspective in areas outside the Natura 2000 network. During the project the model was used to select the most important sites for habitat restoration with mobile-grazing herds (C.3), but also to prepare recommendations for enlarging the Natura 2000 network in Latvia, where most of EU grassland habitats are not sufficiently protected. [The second version of the model was delivered to the Baltic Environmental Forum, which prepared proposals for implementing the national goals of the EU Biodiversity Strategy 2030](#)¹. The methodology of the connectivity model was passed on to two other initiatives:

- The LIFE IP LatViaNature project uses it for developing habitat-specific connectivity models and identifying the most appropriate sites for habitat creation to improve their connectivity.
- [Estonian LIFE Connecting meadows project uses it to develop the model for Estonia](#)¹.

The use of the connectivity model in other projects is financed from the budget of these projects.

ACTION A.6. Study on grasslands, biodiversity and business

The report [Grasslands, Biodiversity and Business](#) has been included in the [database of resources](#) by the Savory Institute (a global movement for holistic management of grasslands) and presented at the 28th European Grassland Federation Conference on 19-21/10/2020 ([Meeting the future demands for grassland production \(europeangrassland.org\)](#)) by its author

Tracy Bridge thus ensuring that the ideas developed during GrassLIFE add to the international pool of knowledge of grasslands.

The examples described in the study Grasslands, Biodiversity and Business and the steps indicated in the report Grassland-based product potential in Latvia, an action for the development of a Grassland Product Label was included in the LIFE IP LatViaNature project proposal, and the work on the Label is progressing since January 2023.

Further business models and product ideas are developed with financing of the project LIFE IP LatViaNature.

ACTION A.7. Replication Strategy

n/a

ACTION C.1. Grassland restoration and improving their conservation status

Long-term maintenance of the restored areas will be ensured, as this requirement is encoded in all partnership agreements with the project farms (Article 4.1).

Adaptive grazing, mowing, cutting of weeds and regrows, and additional seed transfer measures will be continued after the project ends. This is ensured by the GrassLIFE partnership agreements that state that the project results will be maintained for at least 20 years after the project ends. The grazing infrastructure set-up on restored habitats within action C.2 and management equipment purchased under action C.2 will help to ensure this. This is further guaranteed by the fact that all project farms, except Celmiņi Farm, are involved in GrassLIFE2 as demonstration farms, and their owners have agreed to host visitors for the next six years to show them not only the short-term but also the long-term results of the habitat restoration.

The field station “Lejzemnieki” will be used for overnights of the LFN and LU staff after the project ends, as there is a need to ensure after-LIFE management of the habitats restored by the LFN around the building. In addition, the LFN continues to restore habitats of the project site “Ziemeļgauja” within the framework of other projects (WoodMeadow Life and GrassLIFE2). The field station also greatly facilitates the implementation of these projects by allowing project staff and experts to use it.

Land owners and LFN are responsible for covering costs of their respective restoration areas. It is presumed that one source of financing will be available agricultural support payments.

As demonstration farms of project GrassLIFE2 the GrassLIFE partners will receive also funding from this project to cover the demonstration activities.

The field station “Lejzemnieki” will be developed with funding from project GrassLIFE2 as well as LFN is looking for additional sources for maintenance of this territory.

ACTION C.2. Setting up long-term grassland management

Long-term maintenance of the investments will be ensured, as this requirement is encoded in all partnership agreements with the project farms (Article 4.1 of each partnership agreement). All partners have signed the Beneficiary’s Certificate, approving that all investments will be used exclusively for nature conservation activities.

Land owners are responsible for maintenance of the grassland management infrastructure and the necessary costs.

ACTION C.3. Mobile grazing units

At the end of the project, we have 133 Galloway cattle. 55 of them are used for GrassLIFE2, 16 – for WoodMeadowLife, but 63 – for GrassLIFE afterlife needs in 2023.

The GrassLIFE mobile herd and its winter base will be used for the same purposes after the project ends – the grazing of EU grassland habitats located in Natura 2000 sites. Part of it will be used to continue grazing on GrassLIFE pastures (125.8 ha), fulfilling contractual obligations from previous years, but part will be used for grazing on GrassLIFE2 and WoodMeadowLIFE restoration sites.

125.8 ha of grazed areas are grazed with GrassLIFE mobile herd in 2023, but the others are mown by their owners. This is evidenced by the conclusion of grazing contracts which include a clause confirming that the grazed areas will be managed for at least five years after the conclusion of the grazing contract.

ACTION C.4. Demonstration farm – restoration, testing of methods, and setting up the grazing

Adaptive grazing and mowing, cutting of weeds and regrows and seed transfer measures in demonstration farm will be continued after the project ends. This is ensured by the GrassLIFE partnership agreement, which states that the project results will be maintained for at least 20 years after the project ends. This is further supported by the fact that the restored grasslands have been registered for RDP Agri-environment support with a 5-year commitment period.

The partner farm Krastiņi will be responsible for covering the costs. Also the farm is a partner in project GrassLIFE2 that will allow to continue grassland maintenance.

ACTION D.1. After-restoration monitoring

To follow up on the long-term effects of the innovative methods, part of the vegetation monitoring will be continued within the GrassLIFE2 project to prepare a more detailed valuation of selected methods and to use the findings for demonstration purposes on GrassLIFE2 demonstration farms (GrassLIFE farms where innovative restoration methods have been applied).

The monitoring methodology developed within the project is used by the LIFE LatViaNature Project to develop guidelines for monitoring grassland habitat restoration measures in Latvia.

The continuation of the vegetation monitoring will be covered by GrassLIFE2 budget. The use of methodology in other projects will be covered by the budget of the respective projects.

ACTION D.2. Monitoring the impact on ecosystem functions

The habitat restoration monitoring reports will continue to be available on project website and will serve as a resource for those who are interested in habitat restoration methodologies – students, farmers, nature conservation experts, and we will include information about this information in our further communication with these audiences (seminars, workshops etc) within other projects.

No costs foreseen.

ACTION D.3. Monitoring of socio-economic impact, ecosystem services

The findings and messages of the case studies are used by LIFE IP project LatViaNature where the Label of grassland-based products is being developed. The case studies and reports will continue to be available on project website and be a part of the grassland knowledge hub.

No costs foreseen.

ACTION D.4. Evaluation of methods, lessons learned

The toolkit for farmers that is available on project website will be used as a reference material in our further communication with farmers, in farmer trainings about grassland management and other occasions.

No costs foreseen for further dissemination and use of the toolkit.

ACTION D.5. Citizen science approach to grasslands

The "Urban Meadows" movement continues in the project urbanLIFEcircles, implemented by the LFN, Riga City Council and University of Tartu in 2022–2027. In the new project, the role of the Latvian Fund for Nature as a project partner is the establishment of an urban meadow network in Riga. It shall include at least 45 urban meadows, with a total area of 15 hectares or more. To achieve this goal, the methods used in the GrassLIFE project that improve the diversity of natural grasslands will be replicated.

The toolkits for the school's soil programme were donated to the schools that participated in the action, so that they can continue to use them in teaching process.

The Urban meadows programme is financed by the project urbanLIFEcircles.

ACTION E.1. Implementing the communication plan

All communication materials (videos, publications, visual materials) developed within the project are available on the project website and on LFN social media and will be used after the project ends. The content of several materials will be adapted to other grassland related projects.

The project web page grasslife.lv will be maintained and updated by the GrassLIFE2 project.

The costs of material adaptation will be covered by the respective projects. The maintenance of grasslife.lv will be covered by LFN (the annual costs of maintenance) and GrassLIFE2 – updates and development.

ACTION E.2. Demonstration farm – demonstration events

The demonstration work of the demonstration farm will be continued after the project ends. This is ensured by a GrassLIFE partnership agreement, which states that the project results, including the demonstration component, will be maintained for at least 20 years after the project ends. This is also ensured by the fact that Krastiņi (the demonstration farm "Bekas") as is involved in the GrassLIFE2 project and will continue to strengthen its demonstration capacity within the GrassLIFE2 by producing more demonstration material and cover part of the Personnel and catering costs of demonstration events during following six years.

ACTION E.3. Promoting grassland products and services

Toolkit of the grassland product ideas with illustration will continue to be available on the project website and can be used as an informative material about grasslands. Also factsheets and animated movies on grassland ecosystem services will be a valuable material for promotion of grasslands also in future.

The recipe book MEADOW will be used as representative material of LFN and IES, and will continue to be sold at Nordic Nature Medicine Museum and at the restaurant of chef Māris Jansons.

The exposition is maintained after the project's conclusion and will be nourished as a permanent visitor attraction by the IES, using their own funding and resources. This is ensured by a GrassLIFE partnership agreement.

ACTION E.4. Networking with other LIFE and non-LIFE projects

n/a

ACTION E.5. Seminars and meetings

n/a

ACTIONS F

n/a