



LIFE AQPOM

Conservation Arrangements for Lesser Spotted Eagle in Latvia Layman's Report



RUCKA



ABOUT THE PROJECT

LIFE+ project LIFE13NAT/LV/001078 "Conservation Arrangments for Lesser Spotted Eagle in Latvia (LIFE AQPOM)"
Project duration: 01 August 2016 – 30 September 2021.

Project partners:

Latvian Fund for Nature www.ldf.lv
Latvian Ornithological Society www.lob.lv
Rucka Art Foundation www.rucka.lv
'Tiravoti' Ltd.

Project Budget:

2 229 719 EUR
LIFE program funding: 1 566 496 EUR
Co-financing from the Latvian State Budget through the
administration of the Environmental Protection Fund:
254 328 EUR
Partner co-financing: 408 895 EUR

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INTRODUCTION

About a third of all lesser spotted eagles in the European Union (*Clanga pomarina*) and almost a fifth of the world's lesser spotted eagle population nest in Latvia. However, since the end of the 1990s, the number of these protected birds has tended to decrease, by about 15%. If the number of lesser spotted eagles decreases in Latvia, it threatens the existence of the species on a European scale. The main reasons are that the intensity of agriculture and forestry is increasing, thus the number of feeding and nesting places suitable for the lesser spotted eagle decreases.



Jānis Kuze, Project Manager: 'The lesser spotted eagle conservation project was conceived and cherished for more than 10 years, because we have been aware of the problems related to the protection of dispersedly breeding species in Latvia for some time. Since a large proportion of lesser spotted eagles of all Europe nest in Latvia, we are responsible for this species at European level. Our project has done a lot of work to improve the protection of lesser spotted eagle, as well as highlighted wider nature protection challenges in Latvia – we hope that we have also contributed to solving them.'



A week old lesser spotted eagle chick.
Photo: Ģirts Straziņš, LDF

LESSER SPOTTED EAGLE IN LATVIA



Number of nesting lesser spotted eagles in Latvia:
4000 pairs



Around **1/3**
of the European Union
population



In Latvia, Kuja Nature Park
has registered the historically
highest nesting density of lesser
spotted eagles in the world -

**33 couples
per 100 km²**

Medium sized bird of prey

- Meadow and woodland bird, most commonly seen hunting in meadows or sitting on elevations near them
- Protected species



Brown feathering

Legs feathered up to fingers

When gliding, keeps the wings straight,
with the 'fingers' tilted slightly downwards

GOALS OF THE PROJECT

Overall objective:

To improve the conservation status of the lesser spotted eagle in Latvia – one of the most important nesting areas of this species in Europe.

The main threat to the lesser spotted eagle in Latvia is the loss of breeding habitats, as well as the decline of availability and quality of feeding habitats. Therefore, the project worked in two main directions:

- protection of lesser spotted eagle nesting sites;
- restoration of feeding grounds suitable for lesser spotted eagle.



SPECIFIC OBJECTIVES OF THE PROJECT:



Update the Lesser Spotted Eagle Species Protection Plan



To increase the share of the lesser spotted eagle population, which is protected, by 12.5% or 500 pairs, thus achieving that at least 22.5% of Latvia's lesser spotted eagle nesting sites are protected



To increase the expected longevity of the already known lesser spotted eagle nests – to strengthen the nests, as well as to set up artificial nests



To restore the feeding habitats of lesser spotted eagles in the nature park 'Kuja' in the area of 30 ha **and on Grīvu Sala in the nature reserve 'Lubāns Wetland'**, creating pastures in the area of 260 ha



Educate key stakeholders on the protection of feeding and nesting sites for lesser spotted eagles



Raise awareness of the protection of lesser spotted eagle in general public

PROJECT TERRITORIES



📍 **Natura 2000 territory Kuja Nature Park**

A mosaic landscape with alternating forests and diverse grasslands and an outstanding diversity of birds.

📍 **Natura 2000 territory Grīvu Island in the nature reserve 'Lubāns Wetland Complex'**

A 500-ha large meadow massif surrounded by bogs and forests in the northern part of the nature reserve 'Lubāns Wetland Complex' with meadow habitats that have not been managed for a long time.



View of Grīvu sala during project works.
Photo: Jānis Kuze, LDF

Project territories in Kuja Nature park before the restoration works.
Photo: Maija Medne, LDF



Cranes in Grīvu sala.
Photo from documentary "Lesser spotted eagles in Latvia"



PROJECT RESULTS

Updating national species action plan

In Latvia, the first species action plan for the lesser spotted eagle was developed in 2000, but it was not officially approved. As part of the project, the plan was updated, discussed with stakeholders and approved by the Ministry of Environmental Protection and Regional Development in January 2020, using the latest information on species distribution, protection and ecology. The plan was developed by the most experienced lesser spotted eagle expert in Latvia, the internationally known eagle researcher Dr. Uģis Bergmanis. The new plan sets out the main objectives for the protection of the lesser spotted eagle: to maintain the population at around 4,000 couples; to promote stable breeding success; as well as to ensure the nesting of the species in all parts of Latvia that are suitable for nesting, preventing the transformation of the currently inhabited territories into a state unsuitable for nesting.

The plan is available at: http://bit.ly/LSE_SAP

Inventory of Lesser Spotted Eagle Nests

An inventory of nest sites was an important precondition for planning the protection of the lesser spotted eagle. Therefore, the experts for the first four years of the project in the summer season went to look for hitherto unknown and unprotected lesser spotted eagle nests throughout Latvia. Experts have also evaluated the stability of the nests to decide which ones need to be strengthened. The next step after the inventory of nests is the preparation of micro-reserve applications to ensure the protection of nests.

During the four years of the project, **543** new lesser spotted eagle nests have been found throughout Latvia. 31% of nests are located in state forests, 69% in other properties, mostly private.



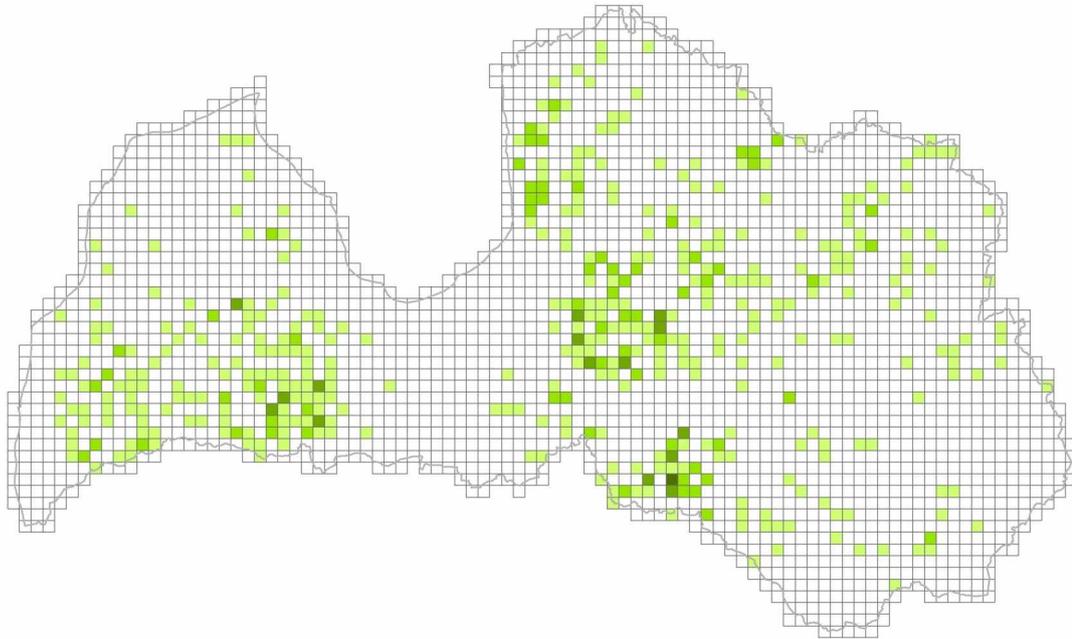


LESSER SPOTTED EAGLE NESTS FOUND: 546



10% of the nests found during the project were affected by forestry or the impact was expected in the near future – logging was carried out in the vicinity of the nest, including during the nesting season, or the stand was prepared for logging, regardless of the presence of lesser spotted eagles.

LESSER SPOTTED EAGLE NESTS FOUND DURING THE PROJECT



- 1
- 2
- 3
- 4

Number of nests per 5x5 km square.

PROTECTION OF LESSER SPOTTED EAGLE NESTS



468

Microreserves established

526 Microreserve proposals prepared and submitted



3277,64 ha

Total area of microreserves

20 508,92 ha

Total area of buffer zones



50

Artificial nests set up

Jānis Kuze in the process of nest monitoring.
Photo from movie "Lesser spotted eagles in Latvia"

The results of the study confirm that microreserves consisting of several mature stands distributed near forest edges that are covered by larger temporal buffers are the most suitable measure for the conservation of the lesser spotted eagle, and the emphasis should be on the protection of the area territory rather than the nest.*

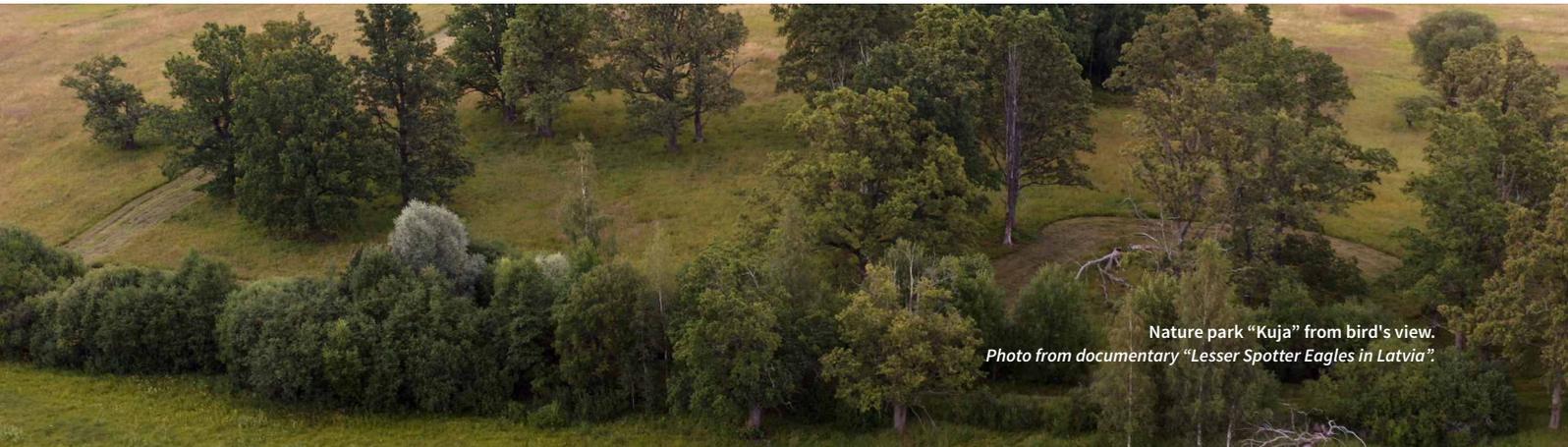
*Source: Publication developed within the project: Uģis Bergmanis et al 'Nest site selection and turnover patterns in support of conservation decisions: Case study of the lesser spotted eagle in the core area of its global population', published in the magazine 'Forest Ecology and Management', 2019.

RESTORATION WORKS

Restoration works in Natura 2000 site nature park 'Kuja'

Nature park “Kuja”, located in Madona district, is special with its outstanding diversity of bird species – in the mosaic landscape, where forests and agricultural lands alternate, you can find 32 protected bird species. The most important is the lesser spotted eagle. In nature park “Kuja” historically highest nesting density of lesser spotted eagles has been found not only in Latvia, but in the whole global area of distribution of the species – 33 pairs in 100 square kilometers (2000.).

Areas such as Kuja Nature Park are especially in need of management that ensures the interests of nature as well. Within the framework of the project 'Conservation Arrangements for Lesser Spotted Eagle in Latvia', in the area of **30 ha in four different territories**, natural grasslands were restored in Kuja to restore habitats suitable for lesser spotted eagle, in cooperation with private landowners and JSC 'Latvia's State Forests'. These territories include grasslands that correspond to habitats of European Union importance, but the meadows were abandoned – overgrown with bushes, so they were not suitable for the feeding of lesser spotted eagle. During the project, bushes were cut here and bush and tree stumps were milled.

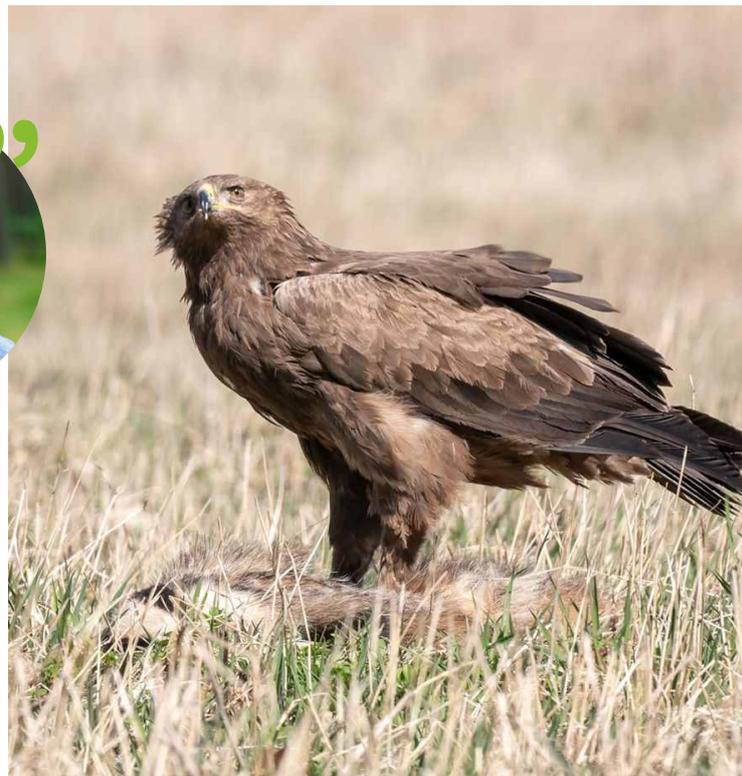


Nature park “Kuja” from bird's view.
Photo from documentary “Lesser Spotter Eagles in Latvia”.



Maija Medne, Project Grasslands Expert: *'After the restoration, changes can be seen in Kuja – in places that were previously covered with dense bushes, grassland vegetation is now beginning to emerge and larger areas are available for the feeding of the lesser spotted eagle. The plants characteristic of natural grasslands appear – various sedges, meadowsweet, tufted hair-grass, water avens, goldilocks buttercup and Jacob's-ladder typical of Kuja meadows. In the restored areas, landowners can graze livestock and collect hay all throughout the area of meadows.'*

Jānis Kuze, Project Manager: *'Lesser spotted eagle already appreciates the restored grassland areas; their presence has been established in all sites that have been managed. With the restoration of the grasslands, we have made this excellent lesser spotted eagle area a little more suitable for them.'*



RESTORED NATURAL GRASSLANDS: 30 ha



6530*

Habitat of
EU importance



4 ha

Fennoscandian
wooded meadows



6410

Habitat of
EU importance



6 ha

Molinia meadows in
calcareous, peaty or
clayey-silt-laden soils



6450

Habitat of
EU importance



17 ha

Northern Boreal
alluvial meadows



6270*

Habitat of
EU importance



3 ha

Fennoscandian
lowland species-rich
dry to mesic
grasslands



Jacob's ladder (*Polemonium caeruleum*) –
a plant typical of Kuja meadows.
Photo: Maija Medne.

Removal of bushes in nature park "Kuja" in 2020.
Photo: Maija Medne.



RESTORATION WORKS

Restoration works on Grīvu sala in Lubāns Wetland Complex

The territory of Grīvu sala is managed by the project partner 'Tīravoti' Ltd. – an organic beef cattle breeder. Under the leadership of the owner Ivars Silkāns, large-scale habitat restoration works were carried out here in order to create feeding habitats suitable for the lesser spotted eagle. Grīvu sala is a large massif of meadows surrounded by bogs and forests in the northern part of the nature reserve 'Lubāns Wetland Complex' with an area of 500 hectares. During the Soviet years, a large part of the meadows was drained to increase their productivity – drainage ditches were dug every 50–100 meters. During the last thirty years, they were overgrown with trees and shrubs, and part of the meadows were overgrown as well. The valuable meadow habitats of European Union importance found on Grīvu Island had not been managed for a long time, the diversity of nature had decreased. In addition, the area was difficult to access, which made farming even more difficult.

During the implementation of the project, Grīvu sala has changed – nature diversity and economic activity have returned to it. At first it was necessary to restore the driveway. This was followed by the restoration of the natural flood water regime of Grīvu sala – the drainage ditches were filled up. With the support of the project, “Tīravoti” could add to their cattle and establish new pasture territories.



Grīvu sala from bird's view.
Photo from film “Lesser spotted eagles in Latvia”



30 km

of drainage ditches
were filled up



2 km

of road restored



10

artificial wetlands were
created – small ponds for
amphibians



57 ha

Restored
natural
grasslands



80

Charolais cattle
purchased

13 ha

Habitat of EU importance:
Fennoscandian wooded
meadows

44 ha

Habitat of EU importance:
Northern Boreal alluvial
meadows:

The work done within the project has ensured that the restored areas are suitable for mowing and grazing, thus they will become suitable feeding grounds for the lesser spotted eagle and nesting places for many other birds – northern lapwing, great snipe, corncrake. Small wetlands are new spawning grounds for amphibians, as well as feeding grounds for birds and watering grounds for grazing livestock. Part of the floodplain grasslands were restored on the filled ditches, and these areas have been now returned to agricultural lands. The proportion of expansive species and weeds in the grasslands has decreased, such as creeping thistle, common nettle and curled thistle, instead there are more and more plants characteristic of floodplain grasslands: various sedges, meadowsweet, yellow loosestrife, tufted hair-grass, garden speedwell, rough meadow-grass, fen bedstraw. Indicator species of natural grasslands can be found in the grasslands of Grīvu sala – goldilocks buttercup and northern bedstraw, as well as a specially protected species – *Cnidium dubium*.

Ivars Silkāns, Owner of 'Tīravoti' Ltd.: 'We have worked on restoration of habitats already previously, but before this project it was practically impossible to manage and improve the territory of Grīvu sala. Since the beginning of cooperation, economic activity has visibly improved here – we have become much more active. Roads and meadows have been restored, and pasture infrastructure has been created. We also have extended cattle herd that we are very proud of. The purchase of equipment, which is one of the benefits of the project, finally made it possible to carry out economic activities in a place that looked hopeless.'



Jānis Kuze, Project Leader: 'At the heart of the project is the lesser spotted eagle and the provision of suitable feeding territories for it. The example of Grīvu sala shows how, by carrying out nature restoration works aimed at one species, we implement a whole set of measures, in essence restoring an ecosystem that benefits both nature diversity and economic activity. Now there are beautiful, naturally diverse meadows where you can successfully graze cattle and develop rural businesses.'



The drainage ditches filled and small wetlands created in Grīvu sala.
Photo: Jānis Kuze, LFN



Specially protected species found in Grīvu sala – *Cnidium dubium*.
Photo: from LFN archive

IMPACT OF THE PROJECT ON NATURE PROTECTION POLICY IN LATVIA

The project 'Conservation Arrangements for Lesser Spotted Eagle in Latvia' has highlighted several systemic nature protection problems in Latvia, which affect not only the protection of lesser spotted eagle.

10% of nests are affected by logging

Experts from the Latvian Fund for Nature and the Latvian Ornithological Society, during the inventory of nest sites, have found that every year about 10% of newly discovered and unprotected nests are affected by economic activities, which in many cases are destroying habitats. These are cases when logging takes place in the immediate vicinity of the nest, or the area around the nest is prepared for logging, regardless of the presence of this protected species.

These cases indicate that there are systemic shortcomings in Latvia in ensuring the protection of dispersedly nesting bird species, and thus Latvia does not comply with the requirements of the EU Directive 2009/147/EC on the conservation of wild birds and the Law on Species and Habitat Protection of the Republic of Latvia. The essence of the problem is that, in Latvia, there are no mechanisms that would make it possible to identify nature values in forests before felling, similarly as economic values are assessed during forest inventory. The data collected during the project on the destroyed nests have been transferred by the Latvian Fund for Nature and the Latvian Ornithological Society to the Ministry of Environmental Protection and Regional Development and the Ministry of Agriculture. Following no action by the state institutions, the Latvian Fund for Nature has prepared and submitted a complaint to the European Commission regarding the violation of the Birds Directive.¹



¹ The complaint was prepared using data from the LIFE AQPOM project, but was prepared as part of a separate, unrelated project

Logging in proximity of lesser spotted eagle nest.
Photo: project LIFE AQPOM.

Compensation for restrictions on economic activity in microreserves is not adequate

The process of establishing microreserves for the protection of lesser spotted eagle nests provoked a sharp reaction from forest owners' organizations – the main objections were that private forest owners do not receive adequate compensation for restrictions on economic activities in microreserve territories, as well as the microreserve establishment process, in which the owners are not sufficiently involved. The Latvian Fund for Nature agreed that changes in the compensation system were needed and urged the Ministry of Environmental Protection and Regional Development (VARAM) to address this issue. A working group on compensation was created at the VARAM, in which, in addition to forest owners' organizations, project representatives also participated, and in 2020, proposals were made for improving the system. The Latvian Fund for Nature will continue to follow the progress of the issue of compensation.



Photo from film
“Lesser spotted eagles in Latvia”

MONITORING

During the project, monitoring of grassland vegetation was carried out at grassland habitat restoration sites in the Kuja Nature Park and in the project areas on Grīvu sala. Vegetation changes in Kuja Nature Park were assessed after the commencement of restoration works – bush cutting and bush stump milling. Observations showed significant structural changes: the introduction of natural grassland species into places where shrubs used to be. Changes in vegetation caused by the restoration of the hydrological regime, as well as the establishment of a grazing system were assessed in the monitoring plots established on Grīvu sala. During the project, the area experienced extreme meteorological situations, which affected the vegetation of the grasslands, but in general, the observations show the restoration and preservation of the vegetation typical of the floodplain grasslands.



The restored vegetation in nature park "Kuja"
Photo: Maija Medne

FILM 'LESSER SPOTTED EAGLES IN LATVIA'

During the project, a nature documentary 'Lesser Spotted Eagles in Latvia' was made under the direction of the RUCKA Art Foundation. It shows the life of lesser spotted eagles, demonstrating the life cycle of a bird, but it is also a story about natural processes in a broader sense. The film shows the processes of habitat restoration in Kuja Nature Park and Grīvu sala in Lubāna wetland complex, and highlights the lesser spotted eagle-friendly farming opportunities. The authors of the film have been following the work of the project leader, ornithologist Jānis Kuze for several seasons, inspecting the nests of lesser spotted eagles and working to ensure their protection.

The director and cameraman of the film was Māris Maskalāns. The film is available in Latvian and English on the Latvian Fund for Nature YouTube channel.



Jānis Kuze, project leader, in the work process.
Photo from film "Lesser spotted eagles in Latvia".



In 2019 Latvian Fund for Nature in cooperation with Latvijas Pasts issued a postal stamp devoted to lesser spotted eagle.

LESSER SPOTTED EAGLE ONLINE

During the project, a live broadcast from two lesser spotted eagle nests was provided. The cameras were located at nests in the beginning of 2018, however, in the first year of their operation, nesting could not be observed yet, although one of the nests (birch) was occupied by the lesser spotted eagle. The following year, one of the cameras (which was near the uninhabited nest in the first year) was relocated and for the next three years of the project, live broadcasts were provided from the nest in a spruce and the nest in a birch (already equipped with the camera in the first year). For all three years, the nesting of lesser spotted eagles in the spruce was successful, while the nest in the birch, although it experienced the start of nesting for two years, was not productive.

Total views on YouTube during 2018 – 2021 **1.1 million.**

Broadcasts available on the [Latvian Fund for Nature YouTube channel](#).



FURTHER ACTION

Work on the conservation of lesser spotted eagle in Latvia must be continued, and the project has laid a solid foundation for this. The species protection action plan developed provides recommendations for both practical habitat protection measures and changes in legislation. The small areal, wintering on another continent and the risks associated with migration, declining numbers and very intensive habitat conversion in nesting areas in the second half of the 20th century and the beginning of the 21st century, as well as low nesting success, places the lesser spotted eagle in Europe and Latvia in the category of specially protected bird species, the protection and research of which will continue to receive increased attention.



