

What?



INHABITANTS OF VETERAN TREES

Impressive veteran trees adorning the Lithuanian landscape have not only historical and cultural heritage, but are also unique habitat for many organisms. Oaks, older than 100 years, growing both individually and in groups, are particularly valuable. Several hundred animal, plant and fungi species can live in one such tree. In total, there are more than 1000 species associated with mature oak trees. Many of them are adapted to live only in old, often hollow trees, and survival of the species depend on abundance and state of such trees. The number of these old trees in Lithuania decreases every year, therefore organisms that are living in them become rarer.

UNIQUE SPECIES

The target species of the project is one of the typical inhabitants of veteran trees, rare and strictly protected in the whole area of Europe – the hermit beetle (*Osmoderma eremita*). The beetle spends the majority of its life (which lasts 3 – 4 years) in a cavity of a tree with sufficient amount of wood mould, where it develops as the larval stage. It becomes a pretty beetle only for the last few weeks of its life. However, not every tree with a cavity is suitable for the beetle – it should be a deciduous tree well warmed by the sun and at least 100 years old. Similar conditions are necessary for most of the species associated with old trees. Therefore, the hermit beetle is an indicator and umbrella species – if we preserve the habitats needed for the beetle, then most of the organisms associated with the veteran trees will also be protected.

PRESERVATION OF VETERAN TREES

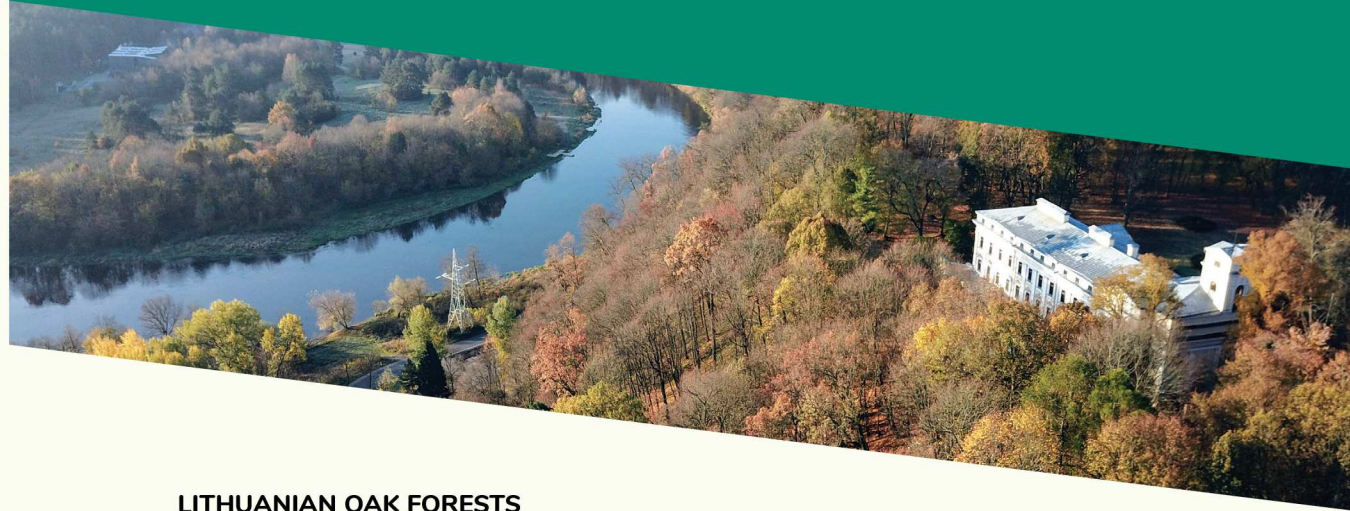
It is estimated that in the next 10 years one fifth of the trees currently inhabited by the hermit beetle and other saproxylic species will be lost. Some of these trees are near the end of their lifespans and might be broken by a strong gust of wind. Other veteran trees with wide crowns, which were formed while growing in the pastures, will be covered by fast-growing trees or shrubs. The old trees growing along roads and around churches will be removed in concern of human safety. Unfortunately, new habitats suitable for the hermit beetles are forming much slower than the old ones are disappearing. Therefore, the project will aim at restoring, preserving and ensuring a long lasting suitable state of the trees, which are currently inhabited, or could possibly be inhabited by the hermit beetles in the near future.

ECOLOGICAL NETWORK

Decline of suitable trees is not the only conservation problem to be solved in order to protect the saproxylic species. One other, no less significant problem, is that the suitable habitats are fragmented to separate patches, surrounded by inhospitable landscape. The big distances and obstacles separating the patches prevent the dispersal of the species and thus cause isolation and fragmentation of the populations. Moreover, the rare and sensitive species cannot occupy a newly formed habitat or move to another patch when the state of their current habitat is deteriorating. One of the most important goals of the project is to provide solution for this problem by connecting areas, characterised by high abundance of habitats suitable for the hermit beetle and other saproxylic species, to an ecological network.



Where?



Project “Ecological network for *Osmoderma eremita* and other species dependent on veteran trees” (LIFE16 NAT/LT/000701) is implemented by Lithuanian Fund for Nature in a partnership with Daugavpils University Nature Studies and Environmental Education Centre, Lithuanian Zoological Garden and Municipality of Kaunas City. The project is financed by the EU’s financial instrument LIFE, Ministry of Environment of the Republic of Lithuania and partners of the project.

More about the project and its implementation you can find on the website <https://www.osmoderma.lt/>

LITHUANIAN OAK FORESTS

A typical ecological network consists of the core zones, for which the most important protected areas are chosen, and connecting corridors with stepping stones - permanent or temporary habitats for the target species of the ecological network. The project will create an ecological network of mature-tree-dependent organisms between Kaunas and Vilnius. Areas important for the saproxylic species conservation will be chosen as its core zones. Special attention will be paid to the oak forests of Kaunas and Dūkštos and the slope of the river Neris near Verkiai.

Kaunas oak forest is the biggest oak forest inside a city in Europe, the legacy of oak trees that were formerly spread in the junction of the Nemunas and Neris rivers. Here, prevailing several hundred years old oak trees are home for about 12 percent of all hermit beetles found in Lithuania.

Dūkštos oak forest is one of the biggest remains of ancient woods in Lithuania. The average age of the oaks growing here is about 200 years. A stable hermit beetle population lives in this forest.

Neris slope near Verkiai is a legendary place known as the manor palace and park. The hermit beetles were observed there over a decade ago, but in the most recent years the species was not found anymore.

The ecological network will also encompass other sites important for the hermit beetle and other saproxylic species conservation (SCIs) – Strėvininkai forest, Vaiguva forest, valley of Lapainia and others. Survey of sites which can be used as stepping stones for temporary stay of the rare species will be carried out during the project.



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Ecological Network for
Osmoderma Eremita and
Other Species Dependent
on Veteran Trees

