

Network of Semi-Natural Grasslands

The Finnish Candidate for the Landscape Award of the Council of Europe 2023



Jewels of the cultural landscape

Traditional rural biotopes are the most important parts of cultural landscapes from nature's point of view. They are unique landscapes whose emergence was facilitated by traditional agriculture and preserving them requires management. Traditional rural biotopes are important for biodiversity, human well-being, and local identity. The most important form of management for traditional rural biotopes is grazing on semi-natural grasslands.

The aim of the Network of Semi-Natural Grasslands Project was to get a better understanding of local interdependencies in traditional rural biotopes with both natural species and grazing animals. The project examined multi-level natural values of traditional rural biotopes on the selected farms, while developing methods of managing them through cooperation among officials, advisers, researchers, and landowners. The Network of Semi-Natural Grasslands Project involved eight farms, four of which are sheep farms, while the rest raise beef cattle.



Traditional rural biotopes, such as wooded pastures, are an important part of cultural landscape.



Photo: Laura Puolamäki | Network of Semi-Natural Grasslands |


Weather and climate
Plants
Pasture animals
Wild animals
The consumer
Traditional
rural biotopes
Farmers
Public debate
Economy

Traditional rural biotopes actor network

When we speak of traditional rural biotopes, we must not forget the extensive network of actors surrounding them, affecting how the traditional rural biotopes can develop. Actor network and interaction among actors influences on the viability of grazing, which is vital, if we want to maintain traditional rural biotopes as a part of the cultural landscape.

Weather and climate

Annual variation in local weather affects on the length of the grazing season, and in doing so, on the biota of the traditional rural biotopes.

Wild animals

The way that wild animals move around in the environment and interact with each other affects traditional rural biotopes. Traditional rural biotopes offer habitat for wild animals.

Plants

Plants are food for animals, and grazing nurtures flora, which needs traditional rural biotopes for its habitat. Trees also provide shade for the animals on hot days.

Pasture animals

Grazing and other behaviours typical of pasture animals have unique effects on traditional rural biotopes. Many natural organisms depend on the effects of grazing.

Farmers

Well-being of the people who take care of the pasture animals is important. They need to be able to live on their income if they are to keep animals and maintain grazing.

The consumer

The economic situation of a farm and the viability of grazing ultimately depends on whether consumers buy the farm's products, such as wool, meat, and milk.

Economy

Conservation of traditional rural biotopes is funded through agricultural subsidies earmarked for traditional rural biotopes. Income from the sale of farm products also play a role.

Public debate

Public debate affects both a farm's profitability and the farmer's motivation, which affects whether grazing on semi-natural grassland has continuity on the farm.



Cultural landscape is home to thousands of species

Traditional rural biotopes are living environments with a multitude of species. Extensive surveys of species were central to the Network of Semi-Natural Grasslands Project. Insects, birds, fungi, and plant species were examined in the traditional rural biotopes of the participating farms. Surveys showed that in addition to being a valuable type of landscape, cultural landscapes provide a home for thousands of species. Dozens of threatened or rare species were also found in the comprehensive surveys of the project.

Resulting from the project, green nightrunner beetles (*Chlaenius nigricornis*), classified as a vulnerable species, were found on the lakeside pastures of three farms. In pastures the beetles used standing water that they found in cloven hoof prints as a living environment for one of their stages of development. This result will help to manage riparian pastures in ways that give the species a chance to survive.



In the project, the species in the selected locations, and the requirements for their living environment were surveyed in different ways.

Photo: Laura Puolamäki | Network of Semi-Natural Grasslands |



Dazzling soil diversity

Things that happen underground also affect the landscape. The diversity of the biota of the soil is many times that of aboveground ecosystems. The soil biota directly affects the types of biota that exist on the surface. Animals that promote decomposition in the soil provide free ecosystem services, such as recycling of nutrients, and improving fertility.

There has not been much research in Finland on the soil of semi-natural grassland and its biota. Evaluation of the biodiversity of the soil was also conducted in connection with the extensive surveys of species in the Network of Semi-Natural Grasslands Project. A more detailed study on soil biodiversity was performed at some of the locations. The results indicate that semi-natural grasslands generally have diverse soil, and the ecosystem services that they provide also affect adjacent arable land.



Researchers at the Natural Resources Institute Finland presented a research method in assessing the abundance and species of worms in the soil of the farms.



Photo: Riikka Söyrinki | Network of Semi-Natural Grasslands | 9



Simple solutions, multiple benefits

In the management of traditional rural biotopes and landscapes, smaller needs of the species are not always considered. Due to the results of the project, a sharp targeting of the management for the favour of local species in the traditional rural biotopes examined is now possible. The results can also be applied to planning of the management of other similar living environments.

Managing traditional rural biotopes in a manner that favours their species does not always require the farm to make investments or great changes to grazing practices. It is often enough to get information on the habitat required by a species. The information, for its part, can make it possible to save a tree that is especially valuable for a certain species, and to graze animals with the right amount of pressure in the right place at the right time. Protecting traditional rural biotope species is essential in the fight against biodiversity loss.

Lakeside grazing is worth supporting. Results of the project indicate that it is of value both for cultural landscapes and biodiversity.



Photo: Piia Virta | Network of Semi-Natural Grasslands |



Common rosefinch

(Carpodacus erythrinus)

Pirkanmaa

The eight farms and one conservation area included in the project are situated in different parts of Pirkanmaa region.



Golden brittlegill

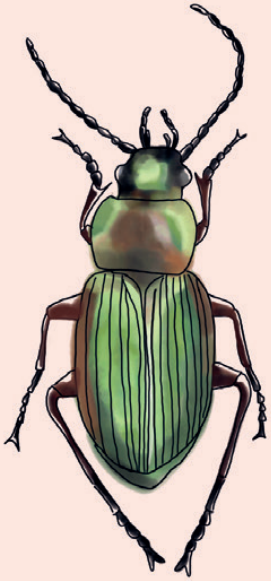
(Russula risigallina)



Common earthworm

(Lumbricus terrestris)





Green nightrunner
(Chlaenius nigricornis)

Purple-edged copper
(Lycaena hippothoe)

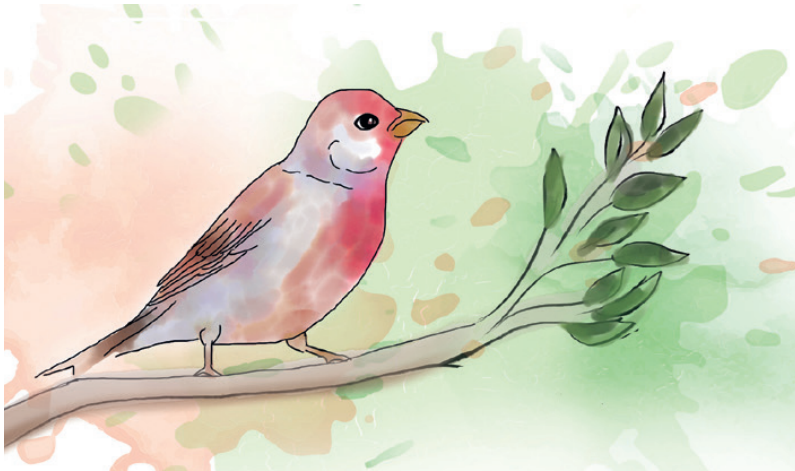


Crucifix ground beetle
(Panagaeus cruxmajor)



Maiden pink
(Dianthus deltoides)

Illustrations @visumonkey



Dialogue among actors

Plenty of direct interaction between farmers and researchers took place in connection with the project's survey work. The interaction also increased the researchers' knowledge and understanding of agricultural nature and the steering mechanisms that have a great effect on the development of management of traditional rural biotopes and the cultural landscape.

For the experts focusing on species surveys, the project gave access to usually closed pastures, which would not have been possible in other conditions because of grazing. Networking with the landowners participating the project proved to be valuable. Although the project itself has ended, the research of insects in semi-natural grasslands continues.

The project also included educational excursions for farmers and authorities as well as theme days in which skills and knowledge accumulated in the project were shared with others.



Photo: Riikka Söyrinki | Network of Semi-Natural Grasslands |





Motivated farmer

The project has increased farmers' skills and knowledge in questions of biodiversity and the motivation to conserve traditional rural biotopes. Farmers expanded their knowledge in close discussions during the field work with researchers conducting the species surveys and by taking part in educational excursions.

The project raised the crucial importance of grazing for preserving the diversity of Finnish nature, which was important and empowering for the farmers. The results of the project and discussions with peers motivated farmers to continue and to increase grazing on semi-natural grassland.

Many farmers are motivated to continue conservation of traditional rural biotopes because they know that their activities have great significance for biodiversity and the landscape.

Photo: Satu Alajoki | Network of Semi-Natural Grasslands |

Consumer choices are important

Choices made by consumers affect what kinds of decisions farmers make. Management of traditional rural landscapes is funded primarily through agricultural subsidies, but the profitability of a farm and grazing on semi-natural grassland is also affected by whether consumers buy the farm's products, such as wool, meat, and milk. Many consumers are interested in how their choices affect sustainable development and biodiversity, but information is not always available about the effects.

The Network of Semi-Natural Grasslands Project included a service design work package to help farms develop their environmental communication and to develop services for public. Excursions, flyers, and information boards designed in connection with the project help the farms promote their conservation work and care of local natural species to the public. Information offered to the public is aimed to incentivise consumer choices that benefit biodiversity, cultural landscapes, and sustainable development.

By buying products from farms that use semi-natural grassland for grazing, consumers can support the preservation of landscapes and biodiversity.



Illustration: Sheep, @fominox, 123RF



Photo: Annika Uddström | Network of Semi-Natural Grasslands |

The Network of Semi-Natural Grasslands Project examined the natural values of traditional rural biotopes on many levels, while developing the management methods for them as a collaborative effort of many parties. The project brought together researchers, officials, and landowners to promote management of cultural landscapes. The project also increased the awareness of farmers and the public on the value of traditional rural biotopes as part of cultural landscapes.



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