

Restoration of peatland in Sous-Martel-Dernier



As part of the renaturalisation project, drainage ditches are being closed off using unique structural methods. Photo: myclimate

This climate protection project involves the renaturalisation of the upland moor in Sous-Martel-Dernier, reducing the amount of greenhouse gases released into the atmosphere. Climate protection is not the only advantage arising from rewetting however, since biodiversity, the water table and tourism are also set to benefit, as is the local construction industry.

In their natural state, moors have enormous carbon storage potential. Globally, moors store 30 per cent of soil carbon, despite the fact that they cover only three per cent of the world's surface. In the past, many of Switzerland's moors were dried out using drainage ditches so that people could use the land for agriculture or harvest peat. Although they have been protected since the Rothenthurm Initiative in 1987, two thirds of the country's moors, which number over 500, are still in their drained state due to a lack of money. As a result, CO₂ continually passes into the atmosphere. Only rewetting guarantees that a drained moor is restored as a long-term store of CO₂.

«The upland moor in Sous-Martel-Dernier is one of the largest areas of natural moorland in Switzerland. The moor in Sous-Martel-Dernier in the canton of Neuchâtel – a moorland of national importance – was renaturated. The climate protection project closed the funding gap and was therefore of key importance for this renaturalisation project, which was conducted by the canton of Neuchâtel. The project is co-financed by federal contributions and by Pro Natura Neuchâtel and Pro Natura Switzerland.»

Intact moorland for long-term carbon storage

On drained moorland, oxygen penetrates into the soil and converts the bound carbon in the peat soil into CO₂, which then escapes into the atmosphere. To rewet moorland, the drainage ditches must be closed off

Project type:

Land Use and Forestry

Project location:

Neuchâtel, Switzerland

Project status:

In operation, credits available


Annual CO₂ reduction:

20 t

Situation without project

Drained moorland releases CO₂ into the atmosphere

Project standard


myclimate Guidelines for
Domestic Projects

Partner



Partner

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Impressions



Garden tiger moth. Natural moors are both

structurally. As soon as the moor returns to its natural intact state, the high water level inhibits the decomposition of the organic material in which large amounts of CO₂ are permanently stored. The climate protection project is made possible thanks to a new methodology used by the Swiss Federal Research Institute WSL, which estimates the amount of CO₂ emissions that are avoided as a result of rewetting. According to this approach, the top 50 cm of renaturalised moorland will bind the emissions of 925 tonnes of CO₂ per hectare over the next 50 to 100 years.

As well as restoring the conditions for CO₂ storage, the revitalisation projects carried out with the support of myclimate on the Neuchâtel moors create habitats conducive to the rare dragonfly species characteristic of raised bogs.

Sébastien Tschanz-Godio, Research Associate, SFFN, canton of Neuchâtel

Multiple benefits

It's not for nothing that moors are protected areas. They are hotspots of biodiversity, since intact moorland provides habitats for rare or even endangered animal and plant species. Renaturalisation also improves flood protection, prevents water pollution, and improves the micro-climate and the landscape. Moorlands provide people with recreational space too, while the funds for the upkeep of the moor mostly flow into regional businesses.

This project contributes to 3 SDGs (as of end 2022):

Find out how myclimate reports these SDGs in our FAQ.

These SDGs have been approved by myclimate:



A renaturalised bog improves flood protection and water pollution control.

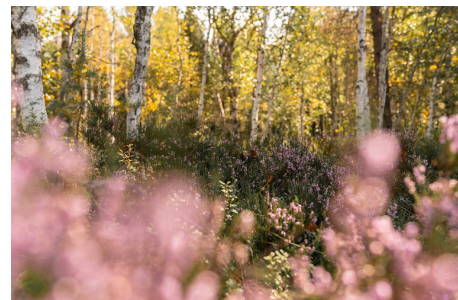


Renatured bogs are large carbon reservoirs.

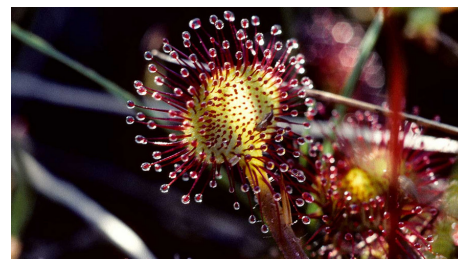


1.8 hectares were rewetted and provide a valuable habitat for rare animal and plant species.

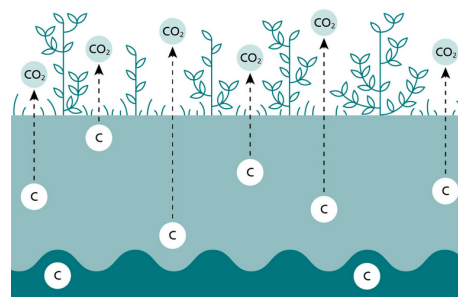
CO₂ sinks and hotspots of biodiversity. Photo: Swiss Federal Institute for Forest, Snow and Landscape Research



The moor at Sous-Martel-Dernier is a moorland of national importance. Photo: myclimate



A typical moorland plant: the carnivorous sundew. Photo: Bureau LIN'Eco



Drained moorlands release CO₂. Infographic: Lena Gubler, Swiss Federal Institute for Forest, Snow and Landscape Research/Raffinerie