Restoration of peatland in Marais Rouge



The raised bog in Marais Rouge in Ponts-de-Martel Photo: S. Tschanz, SFFN

Thanks to this project, the raised bog Marais Rouge in Ponts-de-Martel in Neuchâtel could be restored to its natural state, resulting in the release of less greenhouse gas into the atmosphere. But climate protection is not the only advantage of rewetting this moorland; it also benefits biodiversity, the water balance and the local construction industry.

In their natural state, raised bogs have enormous carbon storage potential. Globally, peatlands 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 peatlands were dried out using drainage ditches in order to use the land for agriculture or to remove peat. Although they have been protected since the Rothenthurm Initiative in 1987, two thirds of Switzerland's over 500 raised bogs are still in their drained state due to a lack of money. Carbon dioxide is released into the atmosphere continuously. Rewetting is the only thing that guarantees that a drained peatland once again becomes a long-term carbon storage facility.

Parts of the peatland Marais Rouge in the Canton of Neuchatel – a moor of national significance – has not yet been rewetted due to a lack of financial resources. The climate protection project filled this financing gap and is thus crucial for the implementation of the renaturation project. The project is co-financed by federal and cantonal contributions (Neuchatel). The renaturation took place in 2021.

Intact Moorland as long-term Carbon Storage

When a moor has been drained, oxygen penetrates into the soil and converts the carbon bound in the peat into carbon dioxide, which escapes into the atmosphere. To rewet a moor, the drainage ditches have to be blocked using construction measures. Once moorland has been returned to its natural, intact state, the high water level inhibits the decomposition of the organic material, in which large quantities of carbon are permanently stored. The climate protection project is possible thanks to a

Project type:

Land Use and Forestry

Project location:

Neuchatel, Switzerland

Project status:

In Operation, exclusive

Annual CO2 reduction:

22 t CO2e

Situation without project

Drained moorland releases CO2 into the atmosphere

Project standard



Partner





Impressions

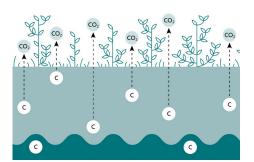


Garden tiger moth. Natural moors are both CO2 sinks and hotspots of biodiversity. Photo: Swiss Federal Institute for Forest, Snow and Landscape Research

methodology developed by the Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), which estimates the volume of CO_2 emissions that are avoided thanks to rewetting. According to this approach, the top 50 cm of the peat bind potential emissions of over 1,000 tonnes of carbon dioxide per hectare for the next 50 to 100 years.

Thanks to the financial support of myclimate, the canton of Neuchâtel has the opportunity to regenerate its peatlands and to restore their function as a carbon sink. This action contributes to climate protection and promotes biodiversity.

Philippe Jacot-Descombes, Deputy Head of Department SFFN, Canton of Neuchâtel



The investments in rewetting largely benefit

regional trade and industry. Photo: Beck und

Staubli

Drained moorland releases carbon dioxide. Info graphic: Lena Gubler, Swiss Federal Institute for Forest, Snow and Landscape

Multifaceted Benefits

Moors are not protected for nothing. They are hotspots of biodiversity. Intact moors offer habitats for rare or even endangered species of animals and plants. Renaturation also improves flood protection, water pollution control, the microclimate and the landscape. It offers the local population a place for recreation. The money for restoring the moor mostly flows into regional trade and industry.

This project contributes to 3 SDGs (as of end 2021):

Find out how myclimate reports these SDGs in our FAQ.

These SDGs have been approved by myclimate:



A renaturalised bog improves protection and water pollution control.



Renatured bogs are large carbon reservoirs.



1.2 hectares are going to be rewetted and provide a valuable habitat for rare animal and plant species.