

PEATLANDS FOR CLIMATE AND BIODIVERSITY

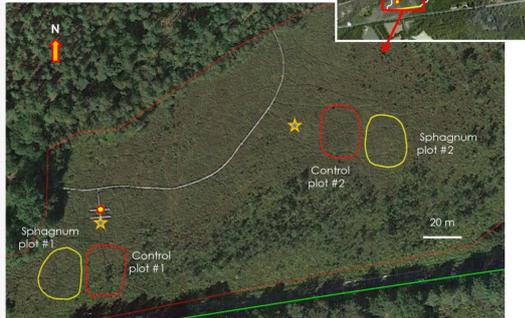
INTERREG NWE CARE-PEAT



France

La Guette peatland

- Fine scale experimental stations
- Automatic piezometer



La Guette

Introduction

The La Guette peatland is located in Neuvy sur Barangeon, 200 km south of Paris. This site is drained by a ditch dug along a road at the outlet of the peatland. This disturbance leads to a drop in the water table level and an increase in the water table fluctuations favorable to the occurrence of common pioneer species (*Molinia caerulea*, *Betula* spp) at the expense of typical peatland species (e.g. *Eriophorum* spp, *Rhynchospora* spp) including *Sphagnum*, a major producer of peat. Restoration works started in 2014 during a project funded by the Région Centre-Val de Loire. The results showed the positive effect of adding *Sphagnum* on C fluxes and vegetation in small plots (2m x 2m). The restoration works funded by the Interreg NWE CARE-PEAT project allows upscaling the first restoration experiment, by stripping peat on the first 5-10 cm and adding *Sphagnum* in patches in 2 areas of approximately 20 m x 30 m (total of 1200 m²). As a result, the stripping of the peat induces the growth of several plant species, with an increase in floristic diversity typical of peat and plant species of interest, beyond the quantities present before the management action, as well as an increase in the capacity to store C through a significant increase of the *Sphagnum* percentage cover.

Issues & key challenges

- The current system is functioning as a net source of C to the atmosphere
- Reduce the abundance of common species
- Avoid closing of the system by trees
- Increase the residence time of water in peatland by reducing its speed

Outcomes & benefits

- Favour C storing in peat by creating places where *Sphagnum* species can grow
- Based on first results, restoration actions can avoid a loss of 5 tonnes of C per ha per year
- Setting up of *Sphagnum* patches is clearly beneficial for the growth of these species in this site

Legal Status

- Espace Naturel Sensible (sensitive natural area, a network of the County Council Cher), within the Natura 2000 Sologne
- Owner: municipality of Neuvy-sur-Barangeon

Habitats and Species

- Habitats (Corinne biotopes):
 - Purple moorgrass wet heaths (31.13)
 - Transition mires (54.5)
 - White beak-sedge communities (54.6)
 - Bog hummocks, ridges and lawns (51.11)
- Species:
 - Sphagnum* (9 species)
 - Drosera rotundifolia*
 - Drosera intermedia*
 - Eriophorum latifolium*
 - Eriophorum polystachion*
 - Eriophorum vaginatum*
 - Gentiana pneumonanthe*
 - Rhynchospora alba*
 - Rhynchospora fusca*

Main highlight of good practice

- Long-term monitoring is a key activity to better understand the system and also communicate with the stakeholders
- Need to run joint actions on both hydraulic conditions and vegetation.

Lessons learnt and the future

- The next step is to reproduce the action in other parts of the peatland
- Good communication between the different stakeholders is a prerequisite to a successful restoration action



Management

Communauté de Commune Vierzon-Sologne-Berry



Information sources

<https://www.lamaisondeleau.org/la-tourbiere-de-la-guette/>
<https://inpn.mnhn.fr/zone/znieff/240030831.pdf>
<https://www.sno-tourbieres.cnrs.fr/site-de-la-guette/>



Eurosite Factsheet
www.eurosite.org
info@eurosite.org

Care-Peat project
<https://nweurope.eu/care-peat>

