

~7 ha
total area

~5 ha
target restoration
area

8
key wetland
species observed

>5 years
of ecological
monitoring

Context & challenges

Located in the UNESCO Biosphere Reserve Pfälzerwald–Nordvogesen, the Dahner Felsenland site sits within one of **Germany's largest continuous forest landscapes**. The area features mixed forests, meadow valleys and the region's characteristic multicoloured Buntsandstein formations. The site lies in the Seibertsbachtal valley at around 240 m elevation. Once an active peat bog fed by the Seibertsbach stream, it was progressively drained through man-made ditches, which dried the peat and enabled dense conifer colonisation.

Today, around **5 ha remain significantly drained**, leading to the loss of bog vegetation, declining wetland biodiversity, disrupted hydrology, and related carbon emissions. EcoTree aims to restore the wetland ecosystem by reactivating its natural water regime and recovering its hydrological, ecological and climate functions.

Project objectives

- **Restore natural hydrology** by reducing drainage to improve water filtration and groundwater replenishment.
- **Re-establish peatland functions**, preventing peat loss and enabling long-term carbon storage.
- **Enable the return of bog-typical vegetation and biodiversity** through selective forest reduction and habitat restoration.
- **Implement long-term ecological monitoring** to track hydrology, vegetation and habitat recovery.

Actions taken

Hydrological & ecological assessment

- Conduction of an inspection protocol to map drainage ditches and the restoration area, which includes, ~3.6 ha classified as wet or moist, ~2.3 ha considered pure moor zone, ~1.4 ha alternating wetness zones.

Hydrological restoration

- Blocking or filling of drainage ditches to raise the groundwater table.
- Restoring natural inflow patterns from the Seibertsbach system.
- Encouraging seasonal inundation and reducing runoff.

Vegetation & habitat restoration

- Stepwise reduction of dense conifer stands (currently ~90% Spruce and Pine).
- Creating light conditions suitable for wetland vegetation to re-establish.
- Protection of naturally occurring wetland plants already present, such as Sphagnum palustre (Sumpf-Torfmoos), Molinia caerulea (Pfeifengras), Various sedges including Schnabel-Segge, Faulbaum, Ohrweide, and Erle

Long-term monitoring

- Multi-year monitoring of hydrology, peat development, vegetation recovery and habitat quality.
- Photographic and botanical documentation.
- Coordination with local stakeholders, landowners and the municipality of Dahn.

Expected benefits

Ecological benefits

- Recovery of a near-natural forested wetland ecosystem within a major biosphere reserve.
- Return of typical bog and fen vegetation, including rare mosses and moisture indicator plants.
- Re-establishment of natural water cycles, enhancing retention and slowing landscape runoff.
- Reduction of peat oxidation and associated carbon emissions.

Climate & water benefits

- Long-term carbon storage through peat preservation and renewed accumulation.
- Improved water regulation within the Seibertsbach valley.
- Increased resilience to droughts and extreme rainfall events.

A project aligned with European extra-financial requirements

Through measurable, tracked, and mapped actions, this project enables companies to document their commitment to sustainability in line with their CSRD & ESRS obligations.

CSRD & ESRS

- Aligned with ESRS E4 - **Biodiversity and Ecosystems standards**, and also meets requirements for **ESRS E1 - Climate** and **ESRS E4 - Water**.
- Allows for the documentation of concrete restoration actions, supported by scientific monitoring
- Provides measurable indicators (restored area, habitats created, species monitored, etc.)

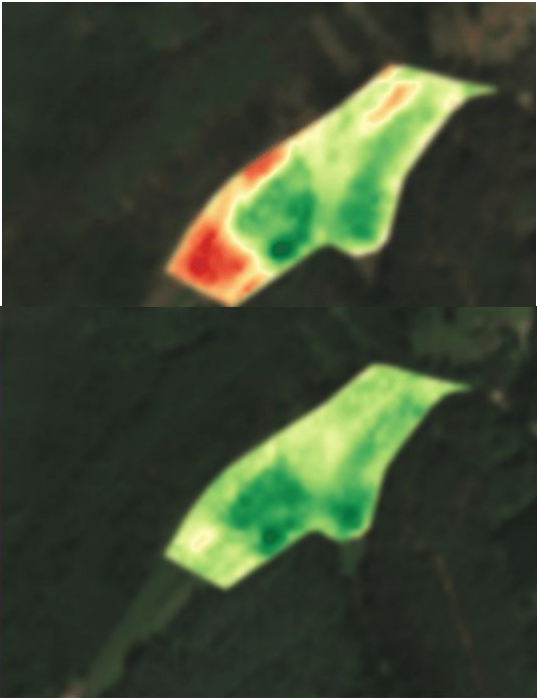
European Green Taxonomy

- Contributes to **environmental objective n°4 : protection and restoration of biodiversity**
- Eligible as an activity for substantial contribution (without prejudice to other objectives)

Calendar*

2024	➤ Detailed ecological and hydrological assessment; botanical inventory; mapping of ditch systems in 2024 ➤ Renaturation work begin in 2025
2025	➤ Start of hydrological restoration works: ditch blocking, water retention measures, selective vegetation interventions.
2026-2030	➤ Expected completion of restoration phase in early 2026. ➤ Multi-year ecological monitoring and adaptive management.

**The timeline for implementing the identified actions may be subject to change based on operational constraints, climatic conditions, and the speed of fund collection required for these actions.*



2023 - today: NDMI - Normalized Difference Moisture Index
49.137673, 7.742148

View of the first steps in the restoration works



EcoTree in a nutshell

European Leader in Nature-Based Solutions, EcoTree allows individuals and companies to commit to the environment by supporting protection, sustainable management and ecosystem restoration projects in Europe.