



Case study #01: Kvorning

Case study cluster: peatlands and wetlands

Country: Denmark

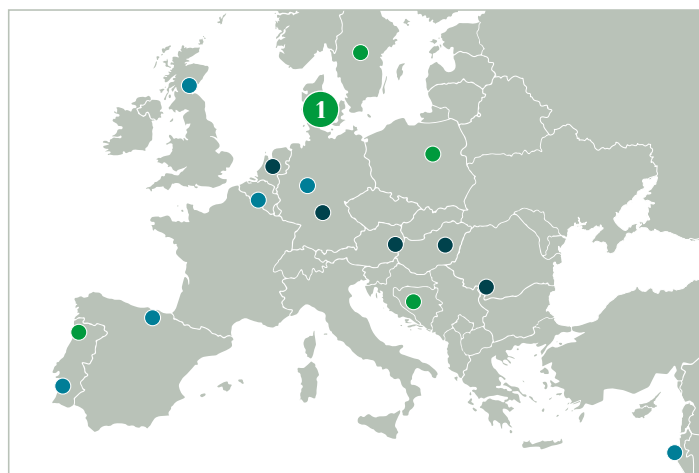
Scientific partner: Aarhus University

Implementation partner:

Naturstyrelsen/The Danish Nature Agency

Twinning case study: Vosborg Enge, Western Jutland, Denmark

Website: <https://naturstyrelsen.dk/ny-natur/klima-lavbundsprojekter/klima-lavbundsprojekt-ved-kvorning-i-noerreadalen>



Demonstration

→ **Type of restoration:** re-wetting/peatland restoration

→ **Size:** 450-500 ha

→ **Location:** River valley to Nørreåen situated in Middle Jutland, Denmark

→ **Value of the case:**

- Reduced greenhouse gas emissions and enhanced carbon sequestration
- Lower nitrogen inputs to Randers Fjord, improving water quality
- Improved Natura 2000 habitats and biodiversity, including the rare Yellow marsh saxifrage
- Enhanced recreational value

→ **Stakeholders involved:** farmers/landowners, municipality, different organisations/NGOs with nature- or recreational interests

→ **Sectors involved:** agriculture, water resources, municipality/spatial planning

→ **Innovations being applied:** The biomass in parts of the case study area has been harvested since 2018 to lower soil nutrient contents to

- 1) reduce phosphorus loss before rewetting is applied, to reduce mobilisation and loss to the aquatic environment
- 2) improve conditions for the establishment of habitats and species of EU community interest

Within the framework of MERLIN, the efficiency of harvesting for nutrient removal and net biodiversity gain will be investigated.



Implemented within MERLIN

- **Restoration measures:** rewetting of 505 ha of wet grassland; establishment of a cattle passage to support grazing in the restored area
- **Size:** 505 ha
- **Scope:** regional. Approximately 40 landowners are affected by the project and a secondary aim is to improve the recreational value and access to the area.
- **Vicinity:** The project area is situated in a rural area, characterised by agriculture and nearby villages.
- **Stakeholders involved:** farmers/landowners, local residents, municipality, different organisations/NGOs with nature- or recreational interests
- **Estimated costs:** 8,700,000€ (including planning, land acquisition, landowners' compensation and construction costs)

Lessons learnt

- Transparency regarding potential limitations of NbS is important
- Precise definition of objectives and, related to this, precise planning of monitoring are essential for the successful and adaptive implementation of NbS

Additional information

The project area is part of a Natura 2000 area and a LIFE IP project including 8 municipalities, aiming to make grazing of natural areas profitable. Furthermore, it is part of a multi-functional land consolidation, that also goes beyond the project borders, when e.g. seeking out compensational land for the farmers and various multi-functional considerations such as recreational purposes, drinking water supply etc.

Strengths

- Multiple Green Deal benefits
- Voluntary landowner commitment
- Strong national support
- Low-maintenance NbS

Weaknesses

- Voluntary participation limits uptake
- No funded impact monitoring

Opportunities

- National restoration target
- Showcase for stakeholder engagement
- Increased local ownership

Weaknesses

- Political uncertainty
- Competing land uses

