CS number and name: 1 – Kvorning

Case study cluster: peatlands and wetlands

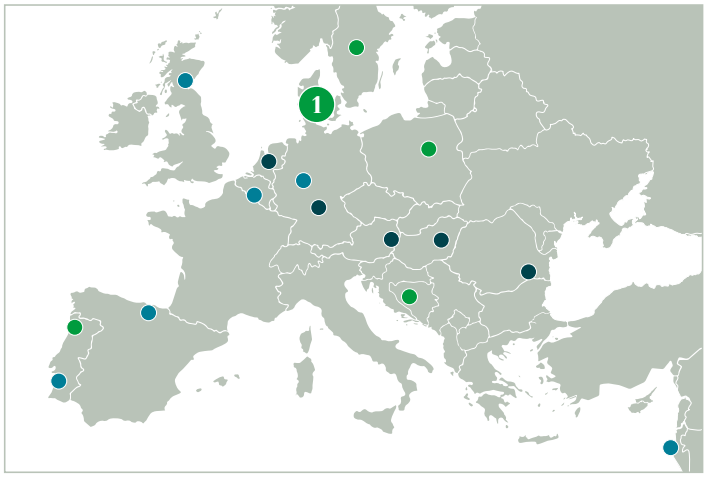
Country: Denmark

Scientific partner: Aarhus University

Implementation partner: Naturstyrelsen/The Danish Nature Agency

Twinning case study: Vosborg Enge, Western Jutland, Denmark

Website: naturstyrelsen.dk/naturbeskyttelse/naturprojekter/klima-lavbundsprojekt-kvorning



Demonstration

- **Type of restoration:** re-wetting/peatland restoration
- **Size:** 450-500 hectares
- **Location:** River valley to Nørreåen situated in Middle Jutland, Denmark
- **Value of the case:** Climate gas emission will be reduced and carbon sequestration will be stimulated by rewetting. The nitrogen content of the water flowing from the area into Randers Fjord will be lowered, benefitting the ecological status of the fjord. The case study area is part of the Natura 2000 network containing habitats such as Alkaline fens (7230) and Petrifying springs with tufa formation (7220), along with a variety of rare and/or endangered species – e.g. Yellow marsh saxifrage, which in Denmark now only exists in around 5 known locations. It is therefore the hope that habitats and species of EU community interest will benefit in addition to species of more local/regional interest. The recreational value will also increase.
- **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
  - i) reduce phosphorus loss before rewetting is applied, to reduce mobilisation and loss to the aquatic environment
  - ii) 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.

The MERLIN project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101036337.

Implementation plans

- **Type of restoration:** A passage for cattle will be established with MERLIN funds, to support grazing of the restored area after implementation.
- **Size:** up to approximately 500 hectares
- **Scope:** Approximately 40 landowners. The passage will enable grazing within both the wetted area and in higher (more dry) areas (appropriate e.g. for grazing). Secondary the project also aims 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 to involve:** farmers/landowners, municipality, different organisations/NGOs with nature- or recreational interests
- **Innovations to be applied:** land consolidation – facilitating and supporting landowners in e.g. finding more suitable arable land to compensate for the lowlands being re-wetted

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.

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