Field excursion day (Wednesday, July 5th, 2023)

The aim of the field tour is to get acquainted with land transitions in Denmark. The contemporary land use is centered on maintaining high agricultural intensity but also the retirement of earlier reclaimed agricultural lands for environmental amenities. The field excursion will start at 9.00 with departure from the parking lot in front of the Geocenter (Øster Voldgade 10).

We will proceed to the Trundholm Mose (https://goo.gl/maps/f2xajLEkXGG6UsJaA), which is a part of UNESCO Geopark Odshered in the north-western corner of Zeland (Sjælland) island island, where Copenhagen also resides) (an https://geoparkodsherred.dk/odsherred/trundholm-mose/. The area was earlier in 19th century reclaimed and dried out and fields were used for cropland, grazing and hay production. Following the discussion on setting aside some agricultural lands for the environmental amenities and rewilding, after the volunteer arrangement with land owners, this area was largely withdrawn from crop production. Yet, some parts of Trundholm Mose are still in use for extensive livestock and some parts serve as hunting grounds. The reclaimed bogs, rich in carbon content, also exhibit an area for natural trails and it is also a site for the historical landmark where Bronze Age Sun Chariot was found (Solwagon, a Danish national treasure), which is now in the Historical Museum in Copenhagen. The Trundholm Mose area is interesting from a natural history perspective, like formed peat areas surrounded by rolling landscapes, but also from the recent land use development and outlook on the future of such areas in the context of rewilding and carbon storage. We will hear about perspectives, discourses, different opinions and varying perceptions of withdrawal of farming and rewetting and walk along the trail.

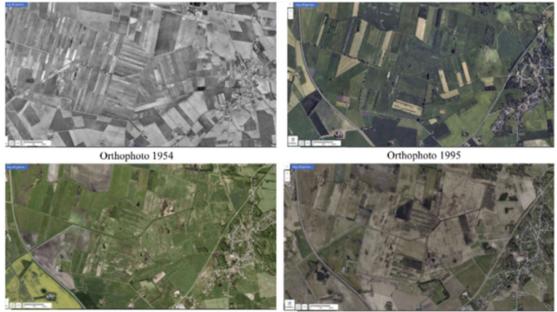


Trundholm Mose. Credits: https://geoparkodsherred.dk/

Before we go, please get acquainted with this area following the field report of UCPH's students, the complex interrelationship between land use, perception of landscapes and climate change, the trust in institutions and expected carbon offsets:

Rosendahl, Ebba, Jamina Rust, Maria Heines, Salome Lepercq, and Thibaut Vandervelden. "A Path to Climate Mitigation. Factors Hindering and Facilitating the Rewetting of Trundholm Mose." Copenhagen: University of Copenhagen, 2021.

On Danish initiatives on carbon sequestration, Climate Council 2020. Kulstofsrige lavbundsjorder [Carbon rich low-lying agricultural soils; in Danish]. https://klimaraadet.dk/da/nyheder/lavbundsjorder-kan-bidrage-markant-og-omkostningseffektivt-til-70-procentsmaalet



Orthophoto 2010

Orthophoto "latest"

Orthophotos showing over time the enlargement of fields and transitioning to grasslands and shrubs ("latest"-2020/2021, Rosendahl et al. 2021)



Land use by 2021.

On the way to Trundholm Mose will observe the transformation of agricultural lands to nonagricultural land uses in the vicinity of Copenhagen, horsification, conversion of former agricultural lands to hunting grounds, and urban expansion.

After Trundholm Mose, we will travel to another site and explore the conversion of agricultural lands to sun energy production, and the role of forest and local streams in reducing runoff and contamination from agricultural fields.

We will have lunch (our lunch packs), nearby Nykøbing Sjælland water tower. https://goo.gl/maps/oyDJMTmZGuWsoxod9

After lunch, we will travel to visit intensive farming areas in Lammefjord (famous for potato and carrot growing), and where dams were built to reclaim lands <u>https://goo.gl/maps/yciiTWWk6doL3kAb6</u>

https://goo.gl/maps/xfFAUhNBxZasNjeEA

On the to Lammefjord we will stop in Vig and, if time permits, Holbaek, to have a grasp on ongoing rural-urban transition processes.

16.00- Expected arrival time to Copenhagen.