

THE POTENTIAL OF PALUDICULTURE IN AUSTRIA

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OVERVIEW

The project „The potential of paludiculture in Austria“ aims at intensifying the state of knowledge in mapped and unmapped peat bog and fen areas and the interactions with agricultural use. The applicability of paludiculture on selected peatlands on marginal agricultural lands will be investigated.

In order to achieve these goals, we need to analyse the current revenue situations of land owners on agriculturally used peat bogs and fen, and to evaluate traditional forms of paludiculture. In addition, consultation with the affected stakeholders is necessary from the very beginning on.

By September 2017, we found two partners who are willing to establish the first *Sphagnum* farming project in Upper Austria. A horticulture special retailer will support the project as economic partner, and purchase the *Sphagnum* cultivated on the pilot area. A research institute on horticulture and gardening is going to investigate the cultivation of *Sphagnum* in the glasshouse, provided our project proposal will be accepted.

CHALLENGES OF INTRODUCING NEW FORMS OF PALUDICULTURE IN AUSTRIA

- In comparison to other countries that are rich in peat bogs and fen, such as Germany or Canada, the ownership of peatlands and the parcels in Austria are usually small structured. Therefore, it may be challenging to find an agreement between all parties affected in a greater environment.
- Overall, agricultural land is expensive and agricultural use is intensive in Austria. This might hinder the introduction of new forms of paludiculture. Therefore, it is essential to motivate land owners to change from intensive agriculture to a wet sustainable way of farming.
- The current challenge is that degradation of agriculturally used peatlands is not yet visible – e.g. revenues are stable and soil sagging remains unnoticed. Therefore, it is challenging to convince land owners to rethink and change to another form of agriculture.

TRADITIONAL FORMS OF PALUDICULTURE IN AUSTRIA



Fig.1 reed cutting in Burgenland (1a), litter meadows in Vorarlberg (1b) and „Moorochsen“ on a fen in Burgenland (1c)

TRADITIONAL FORMS OF PALUDICULTURE have a long history¹ in Austria, though the term ‚paludiculture‘ is not established in Austria, yet.

- Besides roofing, reed (*Phragmites australis*) from the Neusiedlersee (Burgenland) has become more attractive recently as insulating material or for thermal utilisation (Fig. 1a).
- Litter meadows in Vorarlberg: (near-) natural wetlands on fen, being mown once a year (in autumn). Historically, the grass from these meadows was used for bedding in stables; nowadays, it is the task of nature conservation to raise awareness and make these species-rich meadows more popular (Fig. 1b).
- A fen that was originally intensively managed as grassland and field; in 2003, concerned landowners and farmers launched an association and introduced the „Moorochsen“ (moor oxen) and this extensive form of grazing into the south of Burgenland. Together with the local tourist office and the butcher, they established a sustainable form of agriculture and marketing of the products that show a positive influence on the fen as well as on the rural region (Fig. 1c).

UPPER AUSTRIA: POTENTIAL PALUDICULTURE AREA

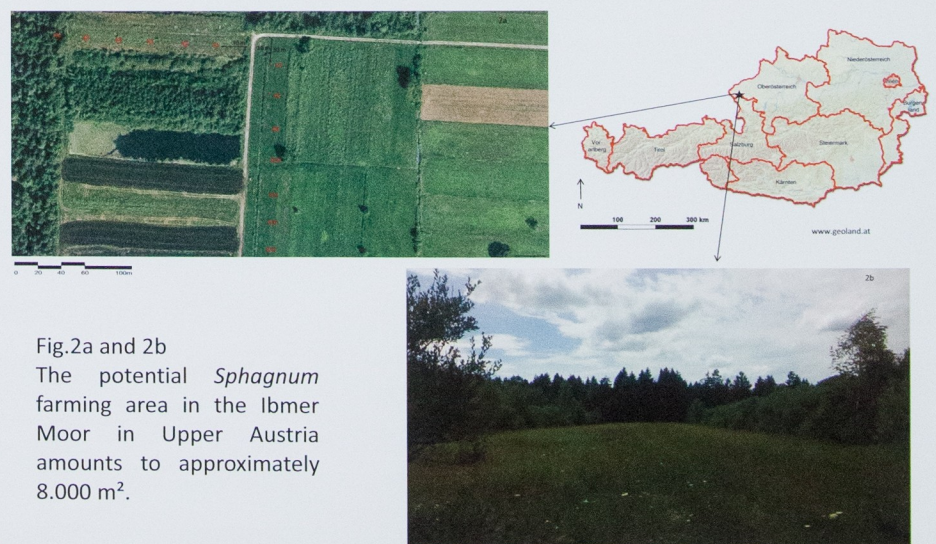


Fig.2a and 2b
The potential *Sphagnum* farming area in the Ibmer Moor in Upper Austria amounts to approximately 8.000 m².

UPPER AUSTRIA: POTENTIAL PALUDICULTURE AREA

The potential *Sphagnum* farming site is located in the Ibmer Moor in Upper Austria (48°03'45.3"N, 12°56'51.6"E). As part of the „Ibm-Weitmoos-Bürmooskomplex“, this peat bog forms the biggest peat complex in Austria², with a size of 20 km². The „Ibmer Moor“ developed in the basin of the Salzach foreland glacier after the last glacial epoch with a height of approximately 430 m a.s.l.

Unfortunately, intense drainage systems for former peat extraction and current intensive agriculture led to degradation of this peatland. Therefore, this site is one of the target regions in our project.

OUTLOOK

The analysis of the peat soil condition, the legal investigation on the impacts of the water and drainage system and nature conservation of the pilot project need to be clarified before submitting the first *Sphagnum* farming project in Austria. Furthermore, we intend the participation on the legislative process on the establishment of paludiculture as wet sustainable form of agriculture in Austria.

REFERENCES

- ¹Schröder et al. (2015). Towards large-scale paludiculture: addressing the challenges of biomass harvesting in wet and rewetted peatlands. *Mires & Peat* 2015(13): 1–18.
²ÖÖ Umweltanwaltschaft: Positionspapier Moore – Erhaltung und Sanierung. Linz, 33 S.