



Inventory of vegetation in post-harvested cutaway peatlands within LIFE REstore project



Dr.biol. Māra Pakalne (NGO «Baltic Coasts»), Dr.biol. Laura Grīnberga (Nature Conservation Agency)

Project “Sustainable and responsible management and re-use of degraded peatlands in Latvia – LIFE REstore”

Inventory of vegetation in post-harvested cutaway peatlands in Latvia is carried out within a LIFE project “Sustainable and responsible management and re-use of degraded peatlands in Latvia” (LIFE REstore, LIFE14 CCM/LV/001103). In total, 28 peatlands were surveyed all over Latvia in 2016. Total area of the studied peatlands reaches 33 200 ha and includes harvested peatlands of different age. Characteristic of vegetation, type of peatland, moisture conditions, peatland degradation stages, presence of drainage system and restoration possibilities was assessed. Different stages of vegetation recovery are characteristics for one peatland site.



Results of the Inventory

In the completion of inventory, 14 vegetation recovery options in peat milling fields were described. The results of the inventory show that the main factors influencing recovery of the vegetation after the drainage and peat extraction are water level and thickness of peat layer.



1.

1. Dry peat fields, dominated by cotton-grass



2.

2. Rewetted peat fields, dominated by cotton-grass



3.

3. Wet peat fields with cotton-grass and Sphagnum communities



4.

4. Formation of vegetation characteristic for raised bog



5.

5. Formation of vegetation characteristic for fen



6.

6. Formation of vegetation characteristic for transition mire



7.

7. Formation of vegetation characteristic for raised bog as a result of restoration activities - raising water level by building of peat dams



8.

8. Formation of vegetation characteristic for bog or transition mire in block cutting sites



9.

9. Afforestation of peat fields



10.

10. Re-introduction of mire vegetation

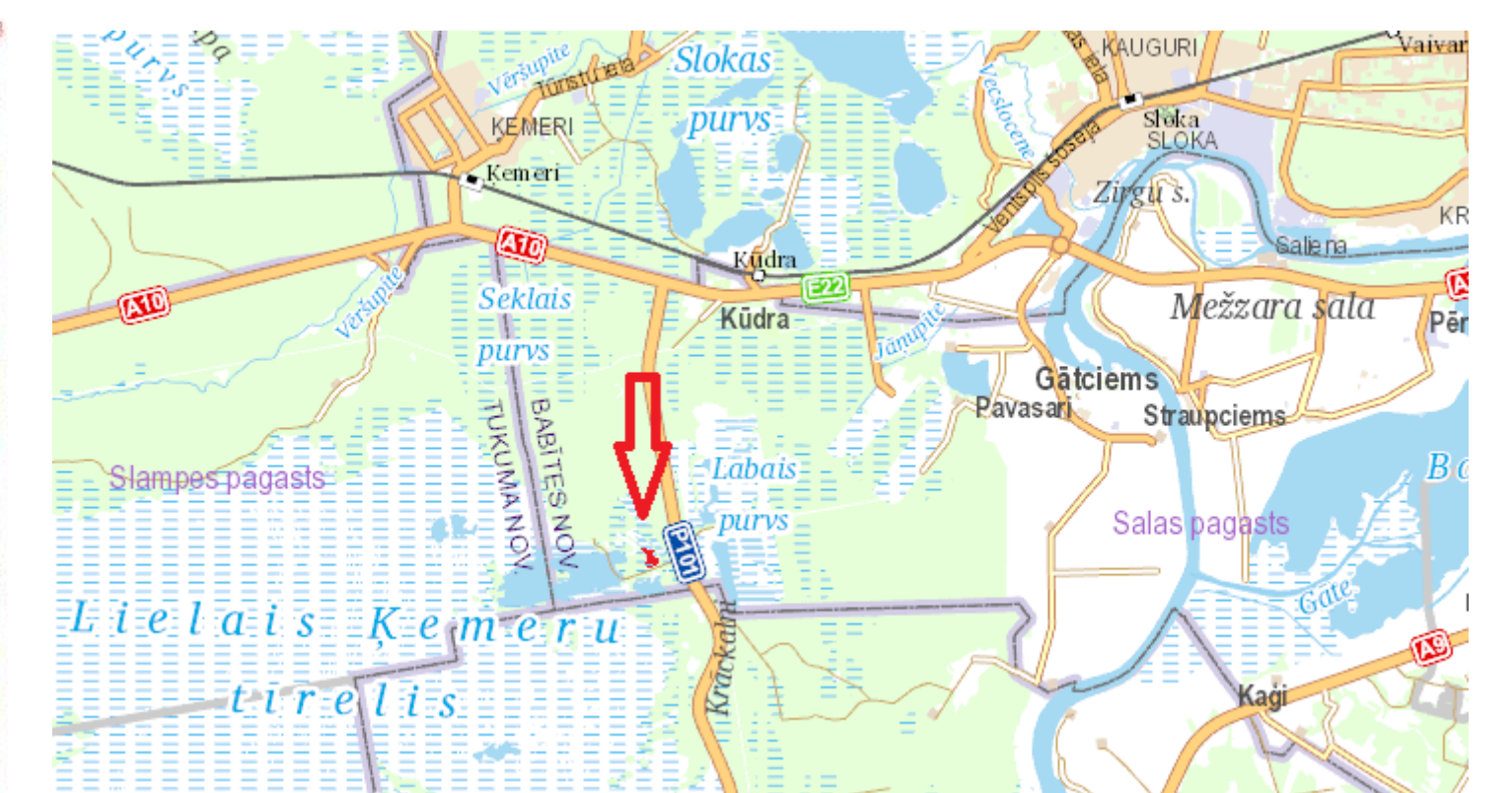
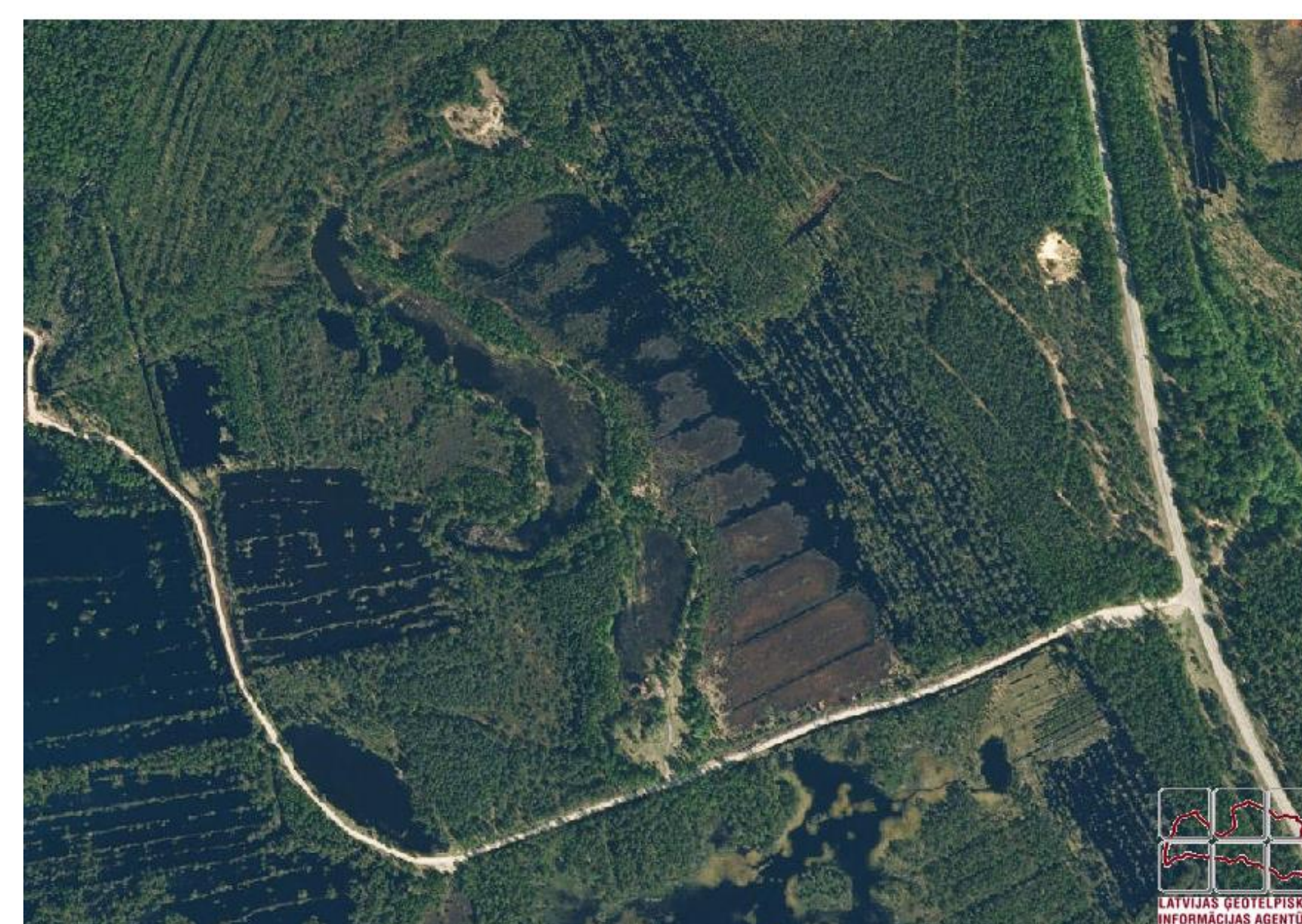
11. Perennial grassland

12. Natural water bodies dominated by reeds

13. Water bodies created by human

14. Active peat milling field

As a result of inventory, territory for peatland restoration activity was chosen in the peat fields located in Ķemeri National park. In this territory, peatland restoration activity will be carried out by the stabilisation of water level and re-introduction of *Sphagnum* species. Here, LIFE REstore project will initiate mire vegetation recovery in the cut-over peatland.



Conclusions

1. Only in case of optimal moisture conditions, vegetation recovery is possible in maximal degraded peatlands.
2. As a result of inventory of post-harvested peatlands in Latvia, 14 vegetation recovery options are described.
3. Establishment of peat-forming vegetation (with *Sphagnum*) is possible in territories where water level isn't below 0,3 m from the peat surface.
4. Where the peat layer is thicker, the impact of groundwater is more important and recovery of vegetation characteristic for bog/transition mire is limited. Reed stands are typical vegetation in such places.

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