

Disturb to conserve!

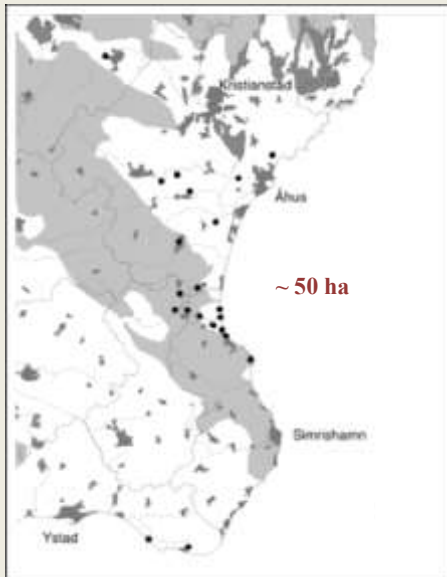


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- Sandy, nutrient poor soils, lime in surface soil
- Discontinuous vegetation cover
- Many specialized and threatened species



Distribution:



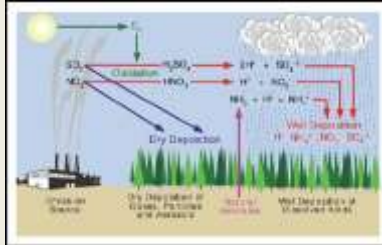
Hilly site with grazing:



Flat area with grazing:



Threats:



→ fragmentation and degradation



The aims of my project:

- Evaluate the importance of soil disturbance in maintaining dry sandy calcareous grasslands
- Evaluate how such restoration options best can be implemented

Historical land use

Historical documents

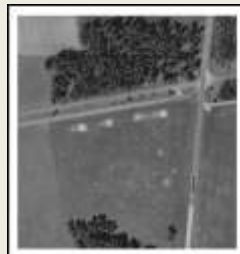
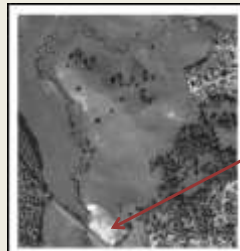


Historical land use



		Original area
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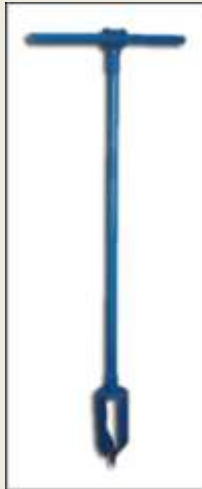
Amount of bare soil



1940

2007

Lime depletion



Depth?

Land use history



Grazing

- Sites differences in depletion depth...
- ...but, no correlation with years since cultivation.
- Never much bare soil the last 70 years

Changes took place longer back in time!



Continuous cultivation

Sand drift



Drifting sand resulting from over-exploitation in the 18th century?!?



Conclusions for management

- Continuous cultivation played important role
- Soil disturbance and the occurrence of bare soil an important factor for many threatened habitats
- Results can be used as an evidence base for improving the restoration measures in these types of habitats

Restoration studies

Earlier studies have shown that soil disturbance can...

- ...decrease the nutrient content of the top soil
- ...increase the Ca concentration in the top soil
- ...reduce the dominant species, increase the occurrence of target species and bare soil



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And thank you for listening!

