

# Land use on humic soils – different outcomes

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## Abstract:

In the Danish landscape low-lying areas on humic soil may be of different type – both on a large and on a small scale. Some areas are nature areas with fens, meadows or pastures and may be sites of high biodiversity. A lot of these areas are not managed any longer, and the consequence is a decrease in biodiversity. Some of the abandoned areas may be affected by former times input of fertilizer and is now dominated by a eutrophic vegetation. Other areas are managed with crop in yearly rotation or as 'permanent' grassland, which may be ploughed but are grown with grass in five years or more. In Denmark there is a political plan for the period 2010-2015 to change 13,000 ha of this mosaic landscape into areas for cleaning the surface water from agricultural land, it is sedimentation of P and denitrification of  $\text{NO}_3$  in new swamps (a). These 13,000 ha are also called 'new nature'. This poster discusses the following topics: 1) What do we lose? Nature quality. 2) What are the risks?  $\text{CH}_4$  and  $\text{N}_2\text{O}$  emission and P outwash. 3) What is the sustainability? Loss of energy and NPK fertilizer. 4) What do we get? Eutrophic swamps for common species and possible pest species. The poster similarly discusses another possibility on low-lying humic soil, i.e. harvest of biomass of naturally occurring grass and herbs for biogas and aftermath of greater areas securing a better management of semi-natural grasslands, C accumulation, and harvest of nutrient and energy.

## References:

- a. Aftale med regering og Dansk Folkeparti om Grøn Vækst 16. Juni 2009.  
[http://www.danskfolkeparti.dk/pictures\\_org/Grn%20vkst-aftale\\_final.pdf](http://www.danskfolkeparti.dk/pictures_org/Grn%20vkst-aftale_final.pdf)