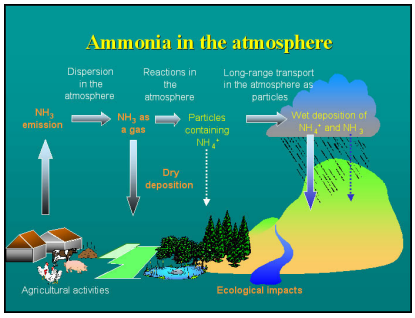
Summary of MARK SUTTON's presentation on:

LANDSCAPE VARIABILITY AND IMPACTS OF AMMONIA IN RELATION TO THE HABITATS DIRECTIVE

In his talk Mark Sutton presented various aspects of ammonia emissions and their impacts on nature in general and on protected areas in particular (see final case study). Ammonia emissions are an inevitable product of (mostly animal) farming – and even so following the so-called 'good practice'. As a pollutant ammonia emissions, being a necessary by-product of animal-raising, have not been able to be reduced significantly over the last two decades, while their impacts on nature become increasingly visible and have been studied intensively (see Mark's presentation on the 'Effects of ammonia on the environment').

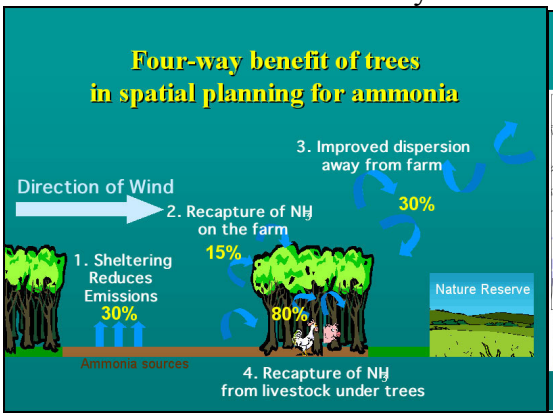


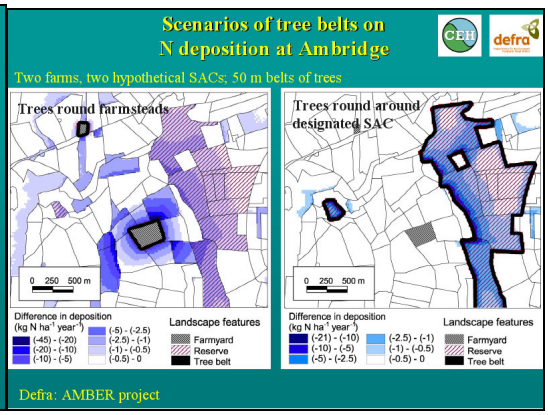
The impacts of ammonia emissions are a function of animal concentration and of microclimatic aspects, and therefore pollution of ammonia is primarily a local and vectorial problem.

Responding to the need of addressing the impacts of ammonia on the environment Mark Sutton's elaborated on ways how to deal with this issue, presenting:

- Process measurements and modelling ammonia fluxes
- The critical load approach
- Regional Up-Scaling up ammonia fluxes and the related problems with low-resolution regional assessments
- Landscape planning for ammonia & nitrogen mitigation

One of the most interesting results of his work (at least for me) was the role of tree belts as a protective measurement. As the model results demonstrate, tree belts around polluting farms or around polluted protected areas can mitigate the impact of ammonia emissions considerably.





Summarised by Thomas Koetz