Contribution from NitroEurope to the ALTERNET Summer School:
"Landscape variability and impacts of ammonia in relation to the Habitats Directive"

ALTERNET stands for *A Long-Term biodiversity, Ecosystem and Awareness Research NETwork*, and is a Network of Excellence under the EU 6th Framework Programme (www.alter-net.info). One of the central integrating activities of ALTERNET is an annual Summer School, held at Peyresq in the French Alps. This year's School was entitled "Trends in Biodiversity: European Ecosystems and Policy" (Sep 1-13, 2007) and develops themes explored at the 2006 summer school[1] .

Enhanced availability of nitrogen represents one of the key drivers affecting ecosystem services, with many links existing between nitrogen, biodiversity and greenhouse gases. While the central focus of NitroEurope is on the effects of nitrogen on greenhouse gas balance, there is also an important task to communicate the importance of excess nitrogen in relation to biodiversity. This talk to the ALTERNET Summer School represents a contribution of NitroEurope to this needed awareness raising.

The lecture focuses on the role of ammonia, which represents a major fraction of the reactive nitrogen emitted to air, especially from agricultural activities. The lecture highlights the many effects of ammonia in relation to biodiversity and shows how by 2020 it will be the major cause of several transboundary air pollution problems in Europe. It is argued that to be most effective, policies to mitigate to excess ammonia need to prioritize, and, in the context of European biodiversity protection, this mean attention to the NATURA2000 network under the Habitats Directive. An example is given from a Public Enquiry concerning the proposed development of a farm adjacent to a NATURA2000 site, together with discussion on the current European-scale policy developments. One of the key challenges for the future will be to develop more integrated policies that make the links between different nitrogen effects (greenhouse gas, biodiversity, air quality, water quality etc).

The PDF gives the main points from the lecture from September 2007. As part of the work of the ALTERNET Summer School, one of the students writes up a review of each lecture. The review of the lecture given in September 2006 (review by Holger Loritz) is available on the web at:

http://www.pik-potsdam.de/infodesk/education/alter-net/2006/programme/02-09.2006/sutton/students_sum_sutton.pdf

[1] www.alter-net.info/POOLED/ARTICLES/BF_TRAINART/VIEW.ASP?Q=BF_TRAINART_195103