

## Press Release

Embargoed to 00.01hrs BST Thursday 14 April

Media Inquiries: David Garner (University of York) +44 (0) 1904 322153, or Ian Caldwell (Stockholm Environment Institute +46 8 674 7460)

### Europe's wildlife under threat from nitrogen

An international study published today warns that nitrogen pollution, resulting from industry and agriculture, is putting wildlife in Europe at risk. More than 60% of the EU's most important wildlife sites receive aerial nitrogen pollution inputs above sustainable levels.

There is evidence of impacts on semi-natural grasslands, heathlands and forests across Europe. This threat is set to continue unless there is further action on emissions of polluting nitrogen gases.

The study calls for a unified methodology of assessing the impact of aerial nitrogen pollution across Europe to help in efforts to safeguard significant conservation sites.

Dr Kevin Hicks, of the SEI at the University of York, said: "While the nitrogen impacts on plant species are relatively well understood its effects on other wildlife, such as butterflies, and the consequent implications for biodiversity are not so clear."

A team of scientists, conservation and environmental managers and policy makers from across Europe, co-ordinated by the Stockholm Environment Institute at the University of York, reviewed evidence from across Europe. The study confirmed nitrogen deposition as a major threat to biodiversity in the Natura 2000 network established under the Community's Habitats Directive to safeguard important habitats and species.

*Nitrogen Deposition and Natura 2000* is published today at the Nitrogen and Global Change conference in Edinburgh. It follows the publication earlier this week of the first European Nitrogen Assessment (ENA).

Mark Sutton, from the UK's Centre for Ecology & Hydrology and the lead editor of the European Nitrogen Assessment, said: "This new volume takes the essential next steps, building on the conclusions of the European Nitrogen Assessment: It highlights the great challenges faced in managing the threat of nitrogen deposition to Europe's flagship conservation network.

"Concerted action is now needed to link European conservation, air pollution and agricultural policies to ensure that the scientifically established damage thresholds are not exceeded."

The study supports the use of EU-wide agreed critical loads and critical levels to define maximum amounts of pollution input that an ecosystem can receive before nitrogen damage occurs. When assessing the case for new development in or around Natura 2000 sites, the

study urges policy makers that critical loads should only be exceeded where there is sound ecological evidence of no resulting adverse effect on the nature conservation integrity of the site.

## ENDS

### Notes to Editors:

- The study results from an international workshop on 'Natura 2000 and Nitrogen Deposition', held in Brussels in May 2009, to review new evidence of nitrogen impacts, develop assessment best practice, and recommend options for future policy development.
- The Stockholm Environment Institute at the University of York coordinated the study in collaboration with the Centre for Ecology & Hydrology (CEH), the Joint Nature Conservation Committee (JNCC) and the Countryside Council for Wales (CCW) under the COST European intergovernmental network for cooperation in research.
- The workshop was attended by 73 scientists, conservation practitioners and policy makers from 13 countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Portugal, Spain, Sweden, Netherlands and the UK. Delegates included representatives from the European Commission DG Environment, and Government departments from EU member states.
- The main sources are emissions of oxides of nitrogen from the burning of fossil fuels by industry and vehicles and releases of ammonia from agriculture, particularly intensive livestock production.
- The Habitats Directive, the cornerstone of Europe's nature conservation policy, requires EU Member States to maintain or restore rare and threatened habitats and species to ensure their long-term survival. The Directive the Natura 2000 network of wildlife sites and requires strict protection measures and a precautionary approach to permitting "plans or projects" that are likely to have a significant effect on a site.
- Stockholm Environment Institute is an independent international research institute. The Institute has established a reputation for rigorous and objective scientific analysis in the field of environment and development. SEI's goal is to bring about change for sustainable development by bridging science and policy. Further information at [www.sei-international.org](http://www.sei-international.org)
- Further Information on the Stockholm Environment Institute at York at [www.york.ac.uk/sei/](http://www.york.ac.uk/sei/)
- More on the study at <http://cost729.ceh.ac.uk/n2kworkshop>