

HABISTAT Workshop

**Monitoring Europe's biodiversity in a post 2010 era:
the role of remote sensing for Natura 2000 reporting
and ecosystem assessment**

13 October 2010, Brussels

This workshop is a joint organisation of the

HABISTAT-consortium
and the
European Commission - Directorate-General Environment

HABISTAT is a project by VITO, INBO, UA, VUB and ALTERRA,
funded by the Belgian Science Policy Office (BELSPO, Stereo II).

Registration:

Participation in the workshop is free, but registration is mandatory. Please register by sending your name, institutional address and contact details in an e-mail to habistat@inbo.be.
Deadline for registration is 30 September 2010.

Posters:

A limited number of poster panels (size A0) will be available. Please contact habistat@inbo.be before 30 September 2010 if you wish to present a poster.

Lunch:

Sandwiches and drinks will be provided for all registered participants.

Venue:

The workshop will take place at the Royal Belgian Institute of Natural Sciences (Rue Vautier - Vautierstraat 29, Brussels), in the vicinity of the European Parliament. The nearest railway station is Brussels-"Luxembourg". Detailed directions can be found at: http://www.naturalsciences.be/museum/access/index_html



Monitoring Europe's biodiversity in a post 2010 era:

With the 2010 target of halting biodiversity loss far from being achieved, a renewed, post-2010 strategy for biodiversity in Europe is currently under discussion. This new strategy will not only consider conservation (e.g. Natura 2000), but will also factor in the role of ecosystems and the services they provide. Vital to a successful implementation of the strategy is our ability to establish a scientific baseline on the state of biodiversity in Europe, and to measure progress towards reaching the objectives. However, acquiring accurate and up-to-date information on biodiversity, both at site, member state and European level, remains a big challenge, as exemplified by the latest reporting on conservation status of Natura 2000 habitats and species in 2007. Remote sensing has been recognized as a powerful, innovative tool, but its use in biodiversity monitoring remains scattered and limited.

This workshop aims to bring best-practice examples of the use of remote sensing in biodiversity recording and monitoring in Europe, as a source of inspiration to the biodiversity conservation community. Special attention will be given to possibilities and opportunities provided by remote sensing for the conservation status assessment of Natura 2000 habitats, habitat suitability assessments for Natura 2000 species and the assessment of ecosystems. In a concluding plenary discussion, recommendations will be made as to how remote sensing can contribute to an operational biodiversity monitoring system, that should enable the establishment of a scientific baseline on the state of biodiversity, and the measurement of progress towards the targets of the EU 2020 vision on biodiversity, which are to be set in December 2010.

HABISTAT:

A classification framework for HABITat STATus reporting with remote sensing methods

The HABISTAT project aims to develop an operation-oriented methodology to map, to monitor and to evaluate vegetations and habitat features in order to determine the habitat conservation status. The focus of the project is to create a transferable platform for operational habitat reportage, integrating novel and advanced remote sensing methodologies. Novel techniques that are used within the project include hyperspectral imagery, super-resolution image reconstruction, ensemble classifiers, spatial contextual description and structural analysis. A major application for the integration and validation of the developed methodologies is the mapping and assessment of the conservation status of Natura 2000 habitats.

For more information, please visit our website: <http://habistat.vgt.vito.be>

Programme

- 9h00 Arrival & coffee
- 9h20 **Welcome** (INBO)
- 9h25 **Introduction** (EU)

- 9h40 **From hyperspectral images to Natura 2000 habitat patches and quality indicator maps: results from the HABISTAT-project** (Birgen Haest for the HABISTAT-team, VITO Belgium)
- 10h10 **Photo interpretation and remote sensing methods used for Swedish Natura 2000 mapping** (Birgitta Olsson, Metria, Sweden)
- 10h30 **Capturing loss and change in Danish protected nature areas using object based image analysis tools** (Geoff Groom, NERI-VIBI, Denmark)

- 10h50 Coffee break

- 11h10 **Habitat mapping in Wales using multiple date remote sensing imagery** (Katie Metcalf, Environment systems, UK & Alan Brown, Countryside council for Wales, UK)
- 11h30 **The application of airborne remote sensing in woodland and landscape ecology: a bird's eye view** (Shelley Hinsley, CEH, UK)
- 11h50 Intermezzo (Sander Mûcher, WUR-ALTERRA, the Netherlands)
- 12h00 **Applied vegetation monitoring with high resolution sensors** (Annett Frick, LUP, Germany)
- 12h20 **Habitat mapping through remote sensing in the Piemonte region: a methodological approach** (Fabio Giannetti, IPLA, Italy)

- 12h40 Lunch break

- 13h40 **Towards a pan-European assessment of riparian zones** (Nicola Clerici, JRC, European Commission)
- 14h00 **MS.MONINA – an integrated multi-scale EO-based monitoring service as European contribution to sustaining global biodiversity** (Stefan Lang, Z_GIS, Univ. of Salzburg, Austria)
- 14h20 **Global Monitoring for Environment and Security (GMES) - state of play and opportunities for biodiversity monitoring at a European scale** (Arno Kaschl, DG-Environment, European Commission)

- 14h40 Coffee break

- 15h10 **How to choose between operational remote sensing methods and products? Towards a common validation framework for the end users** (Anne Schmidt for the HABISTAT-team, WUR-ALTERRA, the Netherlands)

- 15h30 **Discussion: Biodiversity monitoring beyond 2010: what is the role for remote sensing?**

- 17h00 **Closing workshop + reception**
- 18h00 End