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 reporting, 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

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

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Programme

9h00  Arrival & coffee
9h20  Welcome (Jurgen Tack, Research Institute for Nature and Forest, INBO, Belgium)
9h25  Introduction (Marco Fritz, DG Environment, European Commission)

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 (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  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 earth observation 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? (moderated by Maurice Hoffmann, Research Institute for Nature and Forest, INBO, Belgium)
17h00  Closing of the workshop + reception
18h00  End

Poster presentations

A quick method for mapping EU habitat types (John Janssen & Sander Muecher)

BIO_SOS- Biodiversity multi-source monitoring system: from space to species, FP7-SPACE-2001-1 project (Palma Blonda)

Life+ MOTH: Monitoring of terrestrial habitats (Hans Gardfjell & Helena Forsman)

NILS, Swedish landscape monitoring program (Hans Gardfjell & Helena Forsman)

Application of LiDAR remote sensing and photogrammetry techniques to vegetation classifications in the Corrubedo dunes and Carregal and Vixan lakes natural park (Galicia, NW SPAIN) (Miriam Fernandez-Nutieca & Pilar Diaz Cuevas)

Mapping of direct and indirect drivers for changes in ecosystems services (Mediterranean region) (Faidra Maria Bazigou & Joachim Maes)

Monitoring of habitats of EU importance in specially protected nature territory “Skibu purva” using LiDAR and hyperspectral data (Gundars Skudrins)

HABIT-CHANGE: Adaptive management of climate-induced changes of habitat diversity in protected areas (Marco Neuberg)

All presentations will be made available on our website soon after the workshop; so have a look at http://habistat.vgt.vito.be/