

Norbert Pfeifer and András Zlinszky (Editors)

## Proceedings

of the International Workshop on Remote Sensing  
and GIS for Monitoring of Habitat Quality

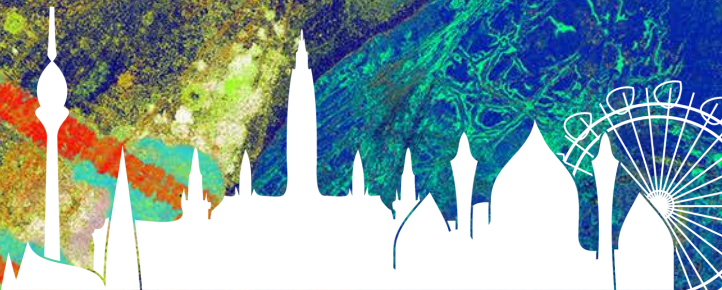
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The *International Workshop on Remote Sensing and GIS for Monitoring of Habitat Quality (RSGIS4HQ)* takes place at Vienna University of Technology on 24 and 25 September 2014 and is organized by Vienna University of Technology's Department of Geodesy and Geoinformation and the Austrian Computer Society with support from the Centre for Ecological Research of the Hungarian Academy of Sciences. The conference is held in parallel with GIScience 2014 at the same venue.

The cover image is a cutout from the grassland vegetation map of the Natura 2000 site Hortobágy at Ágota-puszta, Püspökladány, Hungary, created by Vegetation Classification Studio (A. Kania & A. Zlinszky, see page 52).

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## Table of Contents

<b>List of Reviewers</b> .....	<b>10</b>
<b>Preface</b> .....	<b>11</b>

### Keynotes

*Heiko Balzter, Pedro Rodriguez-Veiga, James Wheeler, Ramesh Ningthoujam, Virginia Nicolas-Perea, Geoff Smith, Stephanie Palmer, Dimitris Stratoulas and Viktor Toth*

<b>Beyond Copernicus: New remote sensing approaches to habitat quality mapping and monitoring</b> .....	<b>13</b>
---	-----------

*Bálint Czúcz, Ildikó Arany, Miklós Kertész, Ferenc Horváth, András Báldi, András Zlinszky and Réka Aszalós*

<b>The relevance of habitat quality for biodiversity and ecosystem service policies</b> .....	<b>18</b>
---	-----------

### Innovative sensors and infrastructure for mapping biodiversity

*Martin Pfennigbauer, Ursula Riegl, Peter Rieger, and Philip Amon*

<b>UAS based laser scanning for forest inventory and precision farming</b> .....	<b>25</b>
--	-----------

*Gottfried Mandlbauer, Christoph Hauer and Martin Wieser*

<b>Monotoring of instream habitats with focus on morphological dynamics based on Airborne Laser Bathymetry</b> .....	<b>30</b>
--	-----------

---

*Stephanie C.J Palmer, András Zlinszky, Heiko Balzter  
and Viktor R. Tóth*

**Remote sensing for aquatic habitat quality mapping and  
EU Water Framework Directive (EU-WFD) reporting. . . . . 35**

*Sagi Filin, Telem Gili and Gil Rilov*

**3-D Modeling of Marine Ecosystem Engineers –  
a Framework for Studying Their Ecological Impact. . . . . 41**

*Stefan Jocham, Wolfgang Dobler, Frank Steinbacher,  
Ramona Baran and Markus Aufleger*

**Using Airborne Hydromapping Data for Habitat  
Investigations in running waters . . . . . 44**

*Reuma Arav, David Niv, Sagi Filin and Gil Rilov*

**Intertidal Habitat Characterization of Rocky Shores Using  
Terrestrial Laser Scans . . . . . 48**

*Adam Kania and András Zlinszky*

**Gimme my vegetation map in an hour!  
Towards operational vegetation classification and mapping:  
an automated software workflow . . . . . 52**

*Tamás Fráter, Tatjana Juzsakova, László Dióssy and Ákos Rédey*

**Unmanned aerial vehicles in airborne environmental  
monitoring . . . . . 55**

**Developing remote sensing tools for  
mapping of habitat parameters**

*Péter Kertész, Géza Király and Péter Burai*

**Tree Species Mapping Using Airborne Hyperspectral  
Remote Sensing . . . . . 60**

---

<i>Werner Mücke, Balázs Deák, Anke Schroiff, Norbert Pfeifer and Hermann Heilmeyer</i>	
<b>Estimation of vertical forest layer structure based on small-footprint airborne LiDAR . . . . .</b>	<b>63</b>
<i>András Zlinszky, Anke Schroiff, Adam Kania, Balázs Deák, Werner Mücke, Ágnes Vári, Balázs Székely and Norbert Pfeifer</i>	
<b>Categorizing grassland vegetation in lowland hay meadows with full-waveform airborne LIDAR: a feasibility study for Natura 2000 . . . . .</b>	<b>67</b>
<i>Andrej Halabuk and Matej Mojses</i>	
<b>Using of MODIS NDVI Time Series for Grassland Habitat Classification and Assessment . . . . .</b>	<b>71</b>
<i>Shaun Levick, Lindsay Hutley, Samantha Setterfield, Natalie Rossiter-Rachor and Jorg Hacker</i>	
<b>Monitoring the distribution and dynamics of an alien invasive grass in tropical savanna habitats with airborne LiDAR . . . . .</b>	<b>78</b>
<i>Lothar Eysn and Markus Hollaus</i>	
<b>The NEWFOR single tree detection benchmark – A test of LiDAR based detection methods using a unique dataset of different forest types within the alpine space . . . . .</b>	<b>79</b>
<i>Hans Ole Ørka, Anne Sverdrup-Thygeson, Erik Næsset and Terje Gobakken</i>	
<b>Mapping old natural forest habitat using airborne laser scanning . . . . .</b>	<b>83</b>
<i>Péter Burai, Balázs Deák, Orsolya Valkó and Csaba Lénárt</i>	
<b>Mapping of Grass Species Using Airborne Hyperspectral Data . . . . .</b>	<b>87</b>
<i>Adam Kania, Eva Lindberg, Anke Schroiff, Werner Mücke, Johan Holmgren and Norbert Pfeifer</i>	
<b>Individual tree detection as input information for Natura 2000 habitat quality mapping . . . . .</b>	<b>89</b>

---

*László Bekő, Ágnes Kerekes, Péter Enyedi, Csaba Lénárt  
and Dimitris Stratoulas*

**Vegetation Mapping in Tisza-lake Using Airborne  
Hyperspectral and LiDAR Data . . . . . 92**

*Géza Király, Gábor Brolly and István Márkus*

**Reed Qualification Based on Airborne Laser Scanning . . . . . 95**

*Emil Bayramov*

**Quantitative Assessment of the Restoration Progress  
in the Shirvan National Park using Multi-Temporal  
Remote Sensing and GIS Analysis. . . . . 98**

*Anamaria Roman, Tudor Mihai Ursu, Sorina Fărcaș,  
Vlad Andrei Lăzărescu and Coriolan Horațiu Opreanu*

**Perspectives:  
Remotely Sensing the Buried Past of Present Vegetation . . . . 108**

*Bernadett Gálya, Éva Bozsik, Nikolett Szöllősi, Péter Riczu,  
Lajos Blaskó, János Tamás, Balázs Deák, Katalin Bökfi and  
Hermann Heilmeyer*

**Modelling of soil properties in a NATURA 2000 habitat site  
in the Carpathian Basin . . . . . 113**

### **GIS modeling of habitat quality based on ecological principles**

*Margit Zohmann, Josef Pennerstorfer and Ursula Nopp-Mayr*

**Combining object-based classification of IKONOS imagery  
and Habitat Suitability Index modelling for alpine rock  
ptarmigan (*Lagopus muta helvetica*) . . . . . 117**

*Barbara Riedler, Lena Pernkopf, Thomas Strasser, Stefan Lang  
and Geoff Smith*

**Towards an integrated assessment of protected riparian forests  
using EO-based indicators . . . . . 121**

---

<i>Carsten Neumann, Gabriele Weiss and Sibylle Itzerott</i>	
<b>A Natura 2000 Monitoring Framework – Using Plant Species Gradients for Spectral Habitat Assessment . . . . .</b>	<b>125</b>
<i>András Zlinszky, Balázs Deák, Adam Kania, Anke Schroiff and Norbert Pfeifer</i>	
<b>Natura 2000 Habitat Quality mapping in a Pannonic salt steppe from full-waveform Airborne Laser Scanning. . . . .</b>	<b>130</b>
<i>Hermann Heilmeyer, Cici Alexander, Balázs Deák, Adam Kania, Werner Mücke, Anke Schroiff, Balázs Székely, Agnes Vári, András Zlinszky and Norbert Pfeifer</i>	
<b>What Remote Sensing Can Do and What Not for Habitat Mapping and Quality Assessment – Lessons from the “ChangeHabitats2” Project . . . . .</b>	<b>134</b>
<i>Eva Lindberg, Jean-Michel Roberge, Therese Johansson and Joakim Hjältén</i>	
<b>Can airborne laser scanning or satellite images, or a combination of the two, be used to predict the abundance and species richness of birds and beetles at a patch scale? . . .</b>	<b>138</b>
<i>Javier Martinez-Lopez, Jon Skøien and Grégoire Dubois</i>	
<b>eHabitat: Large scale modelling of habitat types and similarities for conservation and management of protected areas. . . . .</b>	<b>143</b>
<i>Anke Schroiff, Balázs Deák, András Zlinszky, Norbert Pfeifer and Hermann Heilmeyer</i>	
<b>Comparing instructions to assess Natura 2000 Habitat conservation status across borders . . . . .</b>	<b>147</b>
<i>Roland Achtziger, Cici Alexander, Ursula Nigmann and Oliver Wiche</i>	
<b>Monitoring of Habitat Quality in Fruit Orchards – a promising Example for the Application of Remote Sensing and GIS . . .</b>	<b>150</b>

---

## **Towards operational monitoring: case studies and user requirements**

*Toon Spanhove and Jeroen Vanden Borre*

**User Needs, Possibilities and Limitations of Remote Sensing for Natura 2000 Habitat Monitoring – Results from the European MS.MONINA Project . . . . . 154**

*Juliane Rühl, Oliver Buck, Dirk Hinterlang and Andreas Mütterthies*

**Mapping of habitat type and quality with the Natura 2000 habitat monitoring service of North Rhine-Westphalia (Germany) . . . . . 158**

*Nils Lindgren, Heather Reese, Björn Nilsson, Anna Allard, Marianne Åkerholm, Pernilla Christensen, Ann-Helen Granholm and Håkan Olsson*

**Semi-automated mapping for the National Inventory of Landscapes in Sweden (NILS) using Landsat and LiDAR data . . . . . 160**

*Elmar Csaplovics and Erwin Nemeth*

**Airborne Optical Imaging in Support of Habitat Ecological Monitoring of the Austrian Reed Belt of Lake Neusiedl . . . . . 163**

*Barbara Kosztra, Stephan Arnold, Michael Bock, Gebhard Banko and Christoph Perger*

**The EAGLE data model – concept for parameterized data collection on habitat characteristics . . . . . 168**

## **Late submissions**

*Bo Huang*

**Unified fusion of satellite imagery for seasonal terrestrial habitat mapping in Hong Kong . . . . . 171**



---

*Katie Medcalf, Johanna Breyer, Gemma Bell, Paul Robinson,  
Sam Neal and Martin Horlock*

**Monitoring and Mapping for biodiversity using remote  
sensing: a case study from Norfolk . . . . . 175**

*Thomas Wrbka and Michael Kuttner*

**Nature without barriers – Natura2000 sites as Green  
Infrastructure in the Austrian-Hungarian transborder  
region Fertö-Hansag-Neusiedlersee. . . . . 178**

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## Preface

Biodiversity is one of the most threatened resources globally. Strong commitments to preserving habitats have been made at global, continental and national levels, calling for an evidence-based approach to conservation: monitoring the quality of habitats in space and time.

Remote sensing and GIS have a history in land cover, habitat mapping, and quantification of habitat change. The new challenge is integration and analysis of abiotic factors, vegetation, and habitat maps together with processes influencing the conservation status of each site for quantitative evaluation of habitat quality. This requires high resolution mapping with regional coverage, together with quantitative modeling of how these variables interact to influence habitat quality. The resulting spatially explicit products can build the basis of local ecosystem management and international policy.

The *International Workshop on Remote Sensing and GIS for Monitoring Habitat Quality* brings together remote sensing and conservation scientists, mapping and GIS practitioners, conservation stakeholders and NGOs. We focused beyond land cover and vegetation mapping to the next level of inferring habitat quality and conservation status from processed Earth observation and field data. This international workshop combines the latest developments and future trends in sensor technology, cutting-edge case studies, and operational examples in habitat mapping and quality assessment.

We would like to cordially thank our reviewers who made the peer reviewing of all submissions to our workshop possible. All extended abstracts in these proceedings were accepted based on the peer review by three international experts. With three exceptions in the *late submissions* section which were included because of their modern and relevant topics even though they were not fully reviewed.

Selected full papers based on abstracts from these proceedings will be published in a special issue of the *Remote Sensing* journal (ISSN 2072-4292).



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The conference is organized by the Department of Geodesy and Geoinformation at Vienna University of Technology, Austria (<http://geo.tuwien.ac.at>) and the Austrian Computer Society (<http://www.ocg.at>) in cooperation with the Centre for Ecological Research of the Hungarian Academy of Sciences (<http://www.okologia.mta.hu/en>) and simultaneously with GIScience 2014. We are grateful for their support and especially for the contributions of Felix Ortag from the Department of Geodesy and Geoinformation in organizing everything necessary around the conference. We want to thank especially the company Riegl (<http://www.riegl.com>) for their financial support.

Norbert Pfeifer & András Zlinszky  
Vienna, Summer 2014