

---

## 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).

---

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