

### Title of the symposium:

Landscape monitoring: best practices and new developments for an integrated assessment of landscape change

### Detail of organizer(s):

#### Responsible

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#### Co-organizer

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#### Symposium abstract

Landscapes are important not only for providing sustenance, they also impact the well-being and perceived quality of life of the population, encompass cultural values such as identity and heritage and are the basis for recreational activities and tourism. However, landscapes are rapidly changing across the world. Comprehensive methods for landscape monitoring are thus imperative, both for assessing change in landscape patterns and processes, as well as determining how this change is perceived by and affecting the population. Consequently, landscape monitoring initiatives have been launched at different geographical scales and with varying purposes. For example, in Europe, signatory countries of the European Landscape Convention are obliged to monitor landscape change, and we observe considerable efforts in the landscape research community to develop monitoring tools that are in concordance with the European Landscape Convention in that they measure both the physical and the perceived landscape. Various national programmes have been launched that are in line with the ELC. For example, in Switzerland, a comprehensive set of indicators has been developed and assessed in 2013 through a national survey combined with assessment of bio-physical indicators of landscape change, including artificial light emissions at night or changes in the diversity of agricultural usage. However, since 2013 the tools and datasets have evolved, and we are now presented with novel and innovative means to measure changes in landscapes and their perception. Other successful landscape observatories include the Landscape Character Assessments in the UK, the 3Q national landscape monitoring in Norway or more regional monitorings, including the Observatoire Citoyen du Paysage, Belgium, Wallonia and many others, including the monitoring of designated and/or protected areas.

Outside Europe, similar initiatives have been launched at different scales, including local monitoring programmes (e.g. of protected areas) and regional initiatives. Because landscapes and societies are so diverse, a range of different approaches has been developed, with a considerable potential for cross-fertilisation of ideas between different programmes and between researchers from different fields (natural and social sciences and humanities). In this session our aim is therefore to bring together landscape researchers from a range of disciplines and settings to share their ideas and findings on successful, integrated landscape monitoring that couples physical changes as well as changes to how societies view and relate to landscapes (following the definition of landscape from the ELC). The questions we aim to focus on are:

- How can we monitor landscape change in an integrated manner?
- What novel methods and data sources are available to address diverse perspectives on landscape?
- How can we address emerging trends and new challenges through monitoring?

To make the session broadly appealing yet thematically focused, we will invite talks related to different aspects of monitoring, including:

- Holistic landscape monitoring (interdisciplinary approaches, qualitative approaches, landscape character assessments, art-based approaches)
- Policy-making and landscape monitoring
- Concepts and landscape theories relating to landscape monitoring
- Novel methods and data sources for landscape monitoring (including social media)
- Participation in landscape monitoring, including citizen science

The talks may be conceptual in nature or present empirical data and findings. We invite speakers from a range of backgrounds, including, but not limited to: landscape ecology, geography, sociology, psychology, forestry, agriculture, tourism studies, remote sensing, GIS and others.

### **How your symposia will improve landscape ecology science?**

Landscape monitoring is a challenging field of study, because we are dealing both with changes that need to be assessed from a landscape ecological perspective using natural science methods. At the same time, the definition of landscape as shaped and perceived by people means that we also need to take into account the changes in patterns and processes from the point of view of people, requiring a different set of methodologies to be integrated in order to achieve holistic and comprehensive landscape monitoring, as advocated, for instance, by the European Landscape Convention. In this respect, we believe it is important that researchers are given a platform in the form of this session to discuss landscape monitoring where we foster interdisciplinary dialogue focusing on the assessment of changes in landscapes. We believe this session has the potential to bring together researchers from diverse backgrounds and discuss a joint topic of interest, that of assessing

landscape change, which is It is important that we do not only think about what and how we measure these changes in landscape and perception, but also how they are directly relevant for policy evaluation and decision-making in landscape management.

### **Broad thematic areas**

Broad thematic areas 1st choice: From landscape pattern to functions (variables, metrics, indicators, monitoring)

Broad thematic areas 2st choice: History, dynamic and transformations of landscapes

### **Free Keywords**

Landscape monitoring, landscape change, landscape perception, landscape character assessment, indicator-based monitorings, interdisciplinary landscape research, landscape change, European Landscape Convention

### **Outcomes of symposium**

Special issue in a scientific journal (to be negotiated)