### Science for Carpathians activities

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### **Science for Carpathians**



# FC 2012: Memorandum of Understanding between Carpathian Convention and S4C signed

- Commenting draft protocols
  - Protocol on Cultural Heritage
  - Protocol on Sustainable Transport and Infrastructure
- Participation in activities of Working Groups
- Support to cooperation with EEA



## S4C Internal organisation

Executive Committee (5) and Scientific Steering Committee (30)

- New Members of SSC
  - Eleonora Musco, UNEP Vienna IS CC
  - Ivan Svetozarevič, Serbia
- Communication expert Dominik Kaim (Jagiellonian University, Poland)

### **Projects**

#### 200 years of land change in the Carpathian Basin

Leader: Volker Radeloff, Univerity of Wisconsin, Madison, WI, USA NASA Land Cover / Land Use Change Programme

#### **Objectives**

- Improve knowledge about long-term land use change since mid 1800s
- Quantify the rates and patterns of recent land use change from satellite imagery.
- Understand the drivers of change.

University of West Hungary, Sopron, Hungary
Jagiellonian University, Krakow, Poland
Institute of Landscape Ecology SAS, Slovakia
Federal Institute for Forest, Snow and Landscape Research, CH
Humboldt-University Berlin, Germany

#### 200 years of land change in the Carpathian Basin

#### **Historical maps**

- Second half of 19. century
- 1930s
- 1950s
- point grid 2 x 2 km

#### Satelite data

- -Since 1980, 5-year interval
- Mosaics for whole territory
- Full-cover interpretation



#### Land cover change 1860s – 1950s (intermediary result)

	Urban	Ag	Grass	Forest	Wet	Water	Rock	1860s
Urban	82%	13%	3%	1%	0%	1%	0%	1%
Ag	3%	83%	9%	5%	0%	0%	0%	42%
Grass	2%	44%	42%	10%	1%	1%	0%	23%
Forest	0%	9%	12%	79%	0%	0%	0%	30%
Wet	1%	53%	33%	4%	6%	2%	0%	2%
Water	2%	22%	16%	9%	10%	40%	0%	1%
Rock	0%	8%	9%	9%	0%	4%	71%	0%
1950s	3%	49%	18%	28%	0%	1%	0%	100%

### **Projects**

### **COST** project proposals



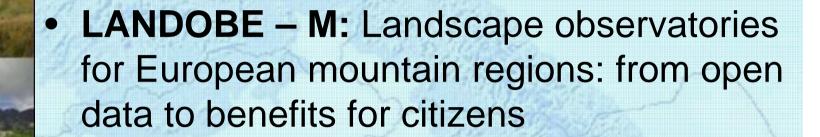
Iountains as beliwethers of global change: observatory network for alpine ecosystems in Europe and worldwide

Leader: Eva Spehn, Global Mountain Biodiversity Assessment of DIVERSITAS

The design, implementation and long-term monitoring of large-scale mountain connectivity conservation from Portugal to the Balkans

Leader: : Martin Price, University of the Highlands and Islands, Perth College, UK





Consultations to Horizon 2020 first call

### **Events**

 MRI Global Fair and Workshop on Long-Term Observing Systems of Mountain Social-Ecological Systems

16-19 July 2014, University of Nevada, Reno, USA

IUFRO: Sustaining Forests, Sustaining People - The Role of Research

5-11 October 2014, Salt Lake City, USA



### FORUM CARPATICUM

Local Responses to Global Challenges September 16-18, 2014, Lviv, Ukraine

Science for the Carpathians



#### Main themes:

- Ecosystem services and land use change.
- Climate change, water and extreme events/hazards
- Natural and cultural heritage
- Smart mountains

Deadline for workshops proposal and abstract submission:

**28 February 2014** 

www.forumcarpaticum.org