

Workshop

“Challenges for a Systemic Environmental Monitoring and Adequate Indicators“

An international scientific conference at the
Italo-German Centre for European Excellency “Villa Vigoni”, October 7th to 10th, 2010

Thursday, October 07th, 2010

18.00 **Arrival and Registration**

19:30 **Welcome, Introduction and Dinner**

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| Hubert Wiggering, Simone Bastianoni, Hans-Peter Ende & Federico Pulselli (ZALF Müncheberg, DE; Univ. Siena, IT) | Questions, Targets and Organisation of the Workshop |
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Friday, October 08th, 2010

08:30 – 10:30 **Section 1: Ecosystem Services and the Specific Character of Complex Systems**

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| Felix Müller, Irene Petrosillo, Benjamin Burkhard, Giovanni Zurlini (Univ. Kiel, DE and Univ. Lecce, IT) | Ecosystem services and the specific character of complex systems |
| Simone Bastianoni & Federico Pulselli (Univ. Siena, IT) | Energy flows and ecosystem services evaluation |
| Rudolf de Groot (Univ. Wageningen, NL) | Potential applications of the ecosystem services concept: experiences from the TEEB project |
| Franziska Kroll, Benjamin Burkhard, Felix Müller (Univ. Kiel, DE) | Quantification and mapping methods of ecosystem services supply and demand |

10:30 – 11:00 **Coffee break**

11:00 – 12:30

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| Federico Pulselli, Luca Coscieme & Sharlynn Sweeney (Univ. Siena, IT and Univ. of Florida, USA) | A physical basis for the evaluation of ecosystem services |
| Joachim H. Spangenberg (UFZ Halle, DE) | Towards indicator systems integrating human and environmental systems |
| Claudia Sattler, Bettina Matzdorf (ZALF Müncheberg, DE) | Ecosystem services – indicators for supply versus demand |

Friday, October 08th, 2010 (continued)

12:30 – 13.30 Lunch break

13.30 – 15:30 Section 2: Land Management Relation to Ecosystem Services

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| Katharina Helming, Hannes König, Katharina Diehl (ZALF Müncheberg, DE) | Interaction of land use and ecosystem services - assessment framework and application examples |
| Silvia Tobias (WSL, Birmensdorf, CH) | Land management interaction with ESS in periurban systems |
| Michael Glemnitz, Ralph Platen & Johannes Hufnagel (ZALF Müncheberg, DE) | Indicators for land management impacts on ESS in agricultural systems - lessons from the ZALF-energy cropping project |
| Marcus Lindner, Hans Verkerk (EFI, FI) | Land management interaction with ESS in forestry systems |

15:30 – 16:00 Coffee break

16:00 – 17:30

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| Katrin Prager (Macaulay, Aberdeen, UK) | Encouraging collaboration for the provision of ecosystem services |
| Chiara Paoli, Paolo Vassallo, Carlo Nike Bianchi et al. (Univ. of Genova) | A systemic assessment of biodiversity monetary value |
| Antonio Bodini (Univ. of Parma, IT) | Cities as complex systems: urban growth and development in an ecosystem perspective |

19:30 Dinner

Saturday, October 09th, 2010**09:00 – 10:30 Section 3: Challenges in Research Data Management**

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| Jörg Pilz, Martina Puhmann (ZALF Müncheberg, DE) | Virtual research environments and open repositories for quality assured primary research data |
| Jan Brase (TIB Hannover, DE) | DataCite – Enabling citable research data sets |
| Benjamin Burkhardt, Franziska Kroll & Felix Müller (Univ. Kiel, DE) | Spatial Tools of Ecosystem Services Assessments and Monitoring |

10.30 – 11:00 Coffee Break

11:00 – 12.30 Section 4: Implementation Issues

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| Uwe Heinrich, N.N. (ZALF Müncheberg, DE) | Status of data in the environmental sciences |
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Saturday, October 09th, 2010 (continued)

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| Roberto Pastres, Daniele Brigolin, Tomas Lovato (Univ. of Venice) | Combining automatic sampling of water quality variables and Very High Order Models for improving the efficiency of monitoring systems in coastal zones |
| Luca Montanarella (JRC Ispra, EU) | Challenges for a systematic soil monitoring system and adequate soil indicators |

12.30 – 13:30 Lunch Break**13:30 – 15:00**

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| Uta Steinhardt, Hans-Peter Ende, Hubert Wiggering (Univ. of Applied Sciences Eberswalde; ZALF Müncheberg, DE) | How to implement ESS into adaptation strategies for regions under climate change |
| Roman Lenz, Werner Rolf, David Peters (Nürtingen-Geislingen Univ., Germany) | Spatio-temporal optimization of landscape services – a „corridor“ approach for planners |
| Paolo Vassallo, Chiara Paoli, Susanna Baiardo & Mauro Fabiano (Univ. of Genova) | Sustainability assessment of an Italian coastal resort region integrated using emergy synthesis |

15:00 – 15:30 Coffee break**15:30 – 16:30**

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| Susanna Baiardo, Chiara Paoli, Paolo Vassallo & Mauro Fabiano (Univ. of Genova) | The value of beaches as eco-services reservoirs |
| Jürgen Ott (Univ. of Landau, DE) | The monitoring-project „Kolbental“ – lessons from a 13-year monitoring study in a protected wetland area |

16:30 – 18:00 Final Discussion**19:30 Dinner****Sunday, October 10th, 2010****08:30**

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| Simone Bastianoni, Hubert Wiggering, Federico Pulselli & Hans-Peter Ende (ZALF Muencheberg, DE; Univ. Siena, IT) | Summary of the results and next steps – The Workshop Communiqué Concluding remarks |
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10.00 End of the workshop and departure

List of Participants

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| Sig.ra | Baiardo | Susanna | IT | University of Genova |
| Prof. Dr. | Bastianoni | Simone | IT | University of Siena |
| Prof. | Bodini | Antonio | IT | University of Parma |
| Dr. | Brase | Jan | DE | TIB Hannover |
| Dr. | Burkhard | Benjamin | DE | University of Kiel |
| Prof. Dr. | de Groot | Rudolf | NL | University of Wageningen |
| | Diehl | Katharina | DE | ZALF Müncheberg |
| Dr. | Ende | Hans-Peter | DE | ZALF Müncheberg |
| Dr. | Glemnitz | Michael | DE | ZALF Müncheberg |
| Dr. | Heinrich | Uwe | DE | ZALF Müncheberg |
| Dr. | Helming | Katharina | DE | ZALF Müncheberg |
| | Kroll | Franziska | DE | University of Kiel |
| Prof. Dr. | Lenz | Roman | DE | University of Nürtingen-Geislingen |
| Dr. | Lindner | Marcus | FI | EFI, Joensuu |
| Dr. | Lovato | Tomas | IT | University of Venice |
| Dr. | Montantarella | Luca | IT | JRC, Ispra |
| Prof. Dr. | Müller | Felix | DE | University of Kiel |
| Dr. | Ott | Jürgen | DE | University of Landau |
| Prof. | Paoli | Chiara | IT | University of Genova |
| Dr. | Petrosillo | Irene | IT | University of Lecce |
| Dr. | Pilz | Jörg | DE | ZALF Müncheberg |
| Dr. | Prager | Katrin | UK | Macaulay, Aberdeen |
| Dr. | Puhmann | Martina | DE | ZALF Müncheberg |
| Prof. | Pulselli | Federico M. | IT | University of Siena |
| Dr. | Sattler | Claudia | DE | ZALF Müncheberg |
| Dr. | Spangenberg | Joachim | DE | UFZ Leipzig-Halle |
| Prof. Dr. | Steinhardt | Uta | DE | University of Applied Sciences Eberswalde |
| Dr. | Tobias | Silvia | CH | WSL Birmensdorf |
| Prof. | Vassallo | Paolo | IT | University of Genova |
| Dr. | Verkerk | Hans | FI | EFI, Joensuu |
| Prof. Dr. | Wiggering | Hubert | DE | ZALF Müncheberg |
| Prof. Dr. | Zurlini | Giovanni | IT | University of Lecce |