



SER 2018 Restoration in the
EUROPE Era of Climate Change

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RESTORATION IN THE ERA OF CLIMATE CHANGE

THE 11TH EUROPEAN SER CONFERENCE
PROGRAMME BOOKLET

9 - 13 September 2018 in Reykjavik, Iceland

SERE 2018

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Dear friends and colleagues,

Welcome to the 11th SER Europe Conference, *Restoration in the Era of Climate Change!* Over the next few days, over 400 people, representing 49 countries from all inhabited continents will meet in Reykjavík to share their experiences, ideas and enthusiasm about ecological restoration and its role for our future.

Ecological restoration has a growing role in environmental management and sustainable development. Mitigation of climate change, safeguarding of biodiversity, reversal of land degradation and increased ecosystem resilience are examples of important goals for ecological restoration today. At the same time restoration outcomes can be influenced by ecological responses to climate change, which may call for reassessment of restoration approaches. These and related issues will be addressed at the conference, which should provide a platform for discussions of means to attain ecological restoration goals in an effective, efficient and engaging manner; not only from ecological point of view, but also within the wider sociological and economic context.

Iceland provides an ideal background for this conference. A volcanic island at the edge of the Arctic, Iceland has ample examples of extreme ecosystem degradation but also a long and rich history of reclamation and ecological restoration. Retreating glaciers are a visual reminder of climate change, frequent volcanic eruptions drive home the importance of ecosystem resilience and widespread primary succession on new surfaces gives valuable insights into key restoration processes. The conference excursions will give you the opportunities to experience some of these issues first hand.

We are thankful for the enthusiastic response to the conference from the restoration community. The conference program includes over 200 oral presentations, about 80 posters and six workshops, in addition to an open Climate Forum that aims at linking science, policies and businesses. Keynote lectures will draw attention to the conference theme and location. The seven distinguished keynote speakers represent diverse backgrounds, from local activists to world renowned scientists.

This conference is hosted by the Soil Conservation Service of Iceland, Agricultural University of Iceland, UNU-Land Restoration Training Program and the Icelandic Environmental Association (Landvernd) in cooperation with SER Europe. We want to use this opportunity to acknowledge the excellent team of colleagues from the host institutions that has worked together on the conference planning and preparation over the past two years. We also thank the sponsors who made this conference possible.

Welcome to Iceland! We hope that you enjoy the SER Europe 2018 conference.

Ása L. Aradóttir, Agricultural University of Iceland
Þórunn Pétursdóttir, Soil Conservation Service of Iceland
Guðmundur Halldórsson, Soil Conservation Service of Iceland

- P-08 UN University Land Restoration Training Programme (UNU-LRT): Who are we and what do we do?**
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- P-09 Results of ESD application as a restoration roadmap in desert region, Mongolia**
Altantsetseg Balt, Bulgamaa Densambu, Budbaatar Ulambayar, Sumjidmaa Sannemekh, Ankhtsetseg Battur
- P-10 Effects of deforestation and subsequent revegetation on springfed stream ecosystems in Iceland**
Bjarni D. Sigurdsson, Helena M. Stefánsdóttir, Brynhildur Bjarnadóttir, Edda S. Oddsdóttir, Jón S. Ólafsson
- P-11 Phytogeographic Gradient Analysis in Guatemala: Baseline for Ecological Restoration at the face of Climate Change.**
Zabdi Lopez, Carlos Avendano
- P-12 Assessment of pond restoration with the 'recovery wheel'**
Marie Daire, Mannon Seguret, Seraphine Grellier, Francis Isselin-Nondedeu
- P-13 Vegetation and soil monitoring in Iceland for early detection and intervention of land degradation**
Bryndis Marteinsdóttir, Elín Fjólá Þórarinsdóttir, Guðmundur Halldórsson, Jóhann Þórsson, Kristín Svavarsdóttir, Magnús Þór Einarsson, Sigbrúður Jónsdóttir
- P-14 Forest restoration monitoring and generation of adaptive management recommendations through images obtained by UAV/LIDAR**
Bruna Paolinelli Reis, Sebastião Venâncio Martins, Elpídio Inácio Fernandes Filho, Tathiane Santi Sarcinelli, José Marinaldo Gleriani, Helio Garcia Leite, Melinda Halassy
- P-15 Nutrient enrichment and changes in plant species at >300 years abandoned farms in Iceland**
Friðþór Sófus Sigurmundsson
- P-16 Monitoring Mitigation Peatlands/Wetlands in Northern Minnesota, USA**
Kurt Johnson, Paul Meysembourg
- P-17 Drone mapping and multispectral indices as a tool for monitoring of mire ecosystems restoration**
Raimo Pajula¹, Laimdota Truus², Kairi Sepp²
- P-18 Designing strategy and planning activities for and by a private restoration project in Chilean Patagonia**
Elena Sobakina
- P-19 Restoration planning in Western taiga habitat type in Estonia**
Teele Paluots, Henn Korjus
- P-20 The ENABLE Consortium: integrated landscape management based on sustainable business models**
Eva Rood, Berglind Orradottir, Isabel Catalan Barrio, Joris de Vente, Simon W Moolenaar
- P-21 Rangeland resources as a life support for human beings, birds, plants and animals**
Ramatsoku Rampai
- P-42 Restoring or not abandoned quarries: it may depend on stakeholder's point of view**
Renaud Jaunatre, Julie Chenot, Elise Buisson, Thierry Dutoit

- P-43 Construction and online provision of a SQL database about riverbanks restoration operations with bioengineering techniques**
Delphine Jaymond, André Evette, Frédéric Bray, André Torre, Vincent Breton
- P-44 Effects of mitigation measures on biodiversity in road construction in Norway. - An interdisciplinary approach.**
Anne C. Mehlhoop
- P-45 Amending soils in post-mining restoration to buffer against changing climates in arid systems**
Amber M. Bateman, Todd E. Erickson, David J. Merritt, Erik J. Veneklaas, Miriam Muñoz-Rojas
- P-46 From research to academic education in Restoration Ecology: salmonids river restoration and other target ecosystems**
Ivan Bernez, Didier Le Coeur, Hervé Daniel, Laetitia Cour
- P-47 Obstacles to restoration: fragmentation of Europe's rivers**
Joshua Jones, Simone Bizzi, Barbara Belletti, Jeroen Tummers, Segura Gilles, Rosa Olivo del Amo, Luca Börger, Wouter Van de Bund, Carlos Garcia de Leaniz
- P-48 Coupled changes in ecological quality and social perception across passively restored rivers in rural landscapes**
Pedro Arsénio, Patricia María Rodríguez-González, Ivan Bernez, Filipe S. Dias, Miguel N. Bugalho, Simon Dufour
- P-49 Effects of climate change on the hydrological regimes of floodplains along the Naryn River, Kyrgyzstan**
Nadira Degembaeva, Florian Betz, Ermeke Baibagyshov, Nursultan Ismailov, Barchynbek Aiyypov
- P-50 Improvement and sustainable management of river corridors in the Iberian Atlantic Region**
Jorge Marquinez Garcia, María Luisa Alonso González, Arturo Colina Vuelta, Tomás Emilio Díaz González, María Fernández García, Elena Fernández Iglesias, José Antonio Fernández Prieto, Laura García de la Fuente, Pilar García Manteca, Mauro Sanna, Antonio Torralba Burrial, Jesús Valderrábano Luque
- P-51 Ecosystem services restoration in the era of climate change : sand dune services**
Lorena Peña, Miren Onaindia, Ibone Ametzaga, Igone Palacios-Agundez, Gloria Rodríguez, Beatriz Fernández de Manuel, Ariane Amaya-Orozco
- P-52 Key concepts for ecological restoration in the deep-sea**
Nadia Papadopoulou, Telmo Morato, Christopher Smith, Meri Bilan, Marina Carreiro-Silva, Cristina Gambi, Laura Carugati, Roberto Danovaro, Andrea Gori, Cristina Linares, Dan Jones, Ana Colaço, Jozee Sarrazin, Marjolaine Matabos, Eva Ramirez-Llodra, Teresa Amaro, Dave Billett, Thanos Dailianis, Vasilis Gerovasileiou, Anthony Grehan, Ines Martins, Katerina Sevastou, Cindy Van Dover, James Aronson, Andrew Sweetman
- P-53 Ranking Natura 2000 habitats and Natura 2000 areas for nature management and restoration in Finland**
Santtu Kareksela, Marja Hokkanen, Jussi Päivinen, Ari Lahtinen, Tuomas Haapalehto, Katja Raatikainen, Kasper Koskela
- P-54 The RestHAIP project: ecological restoration of habitats in the Alps**
Francesca Madormo, Régis Dick, Stéphanie Huc, Laura Poggio, Thomas Spiegelberger, Santa Tutino, Mauro Bassignana
- P-55 Blütenhöfe21 / Floweryards21: A Church District for Biodiversity**
Julia-Maria Hermann, Hagen Freiherr von Massenbach

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Improvement and sustainable management of river corridors in the Iberian Atlantic Region

Jorge Marquínez García¹, María Luisa Alonso González¹, Arturo Colina Vuelta¹, Tomás Emilio Díaz González²,
María Fernández García¹, Elena Fernández Iglesias¹, José Antonio Fernández Prieto¹, Laura García de la Fuente¹,
Pilar García Manteca¹, Mauro Sanna¹, Antonio Torralba Burrial², Jesús Valderrábano Luque¹

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In the Iberian Atlantic Region, there are several landscape change processes (changes in the land use, presence of invasive species, activities regarding public use, intensification of agricultural and livestock farming, climate change) and phytosanitary problems (alder diseases caused by *Phytophthora* ssp.) that, currently, are threat factors of river corridor habitats. These factors are deteriorating and fragmenting them, and having a relevant impact on their functionality.

The LIFE Fluvial project aims to mitigate these consequences, to improve the conservation status and to develop sustainable management measures of river and fluvio-estuarine corridors. Selected areas in the project are Natura 2000 sites belonging to several river basins located in the northwest of the Iberian Peninsula (Spain and Portugal).

To this aim, LIFE Fluvial has designed the following actions:

A detailed analysis of the current status and implementation of a trans-national model for the sustainable management of river corridors to reduce the negative impact caused by the threats and to avoid their spread towards other UE territories.

Design and implementation of restoration projects to improve conservation *status* of the natural habitats of interest, connectivity and to reduce fragmentation.

Control of invasive flora species that pose a threat to the conservation of river corridors, and improvement of their phytosanitary state by removing trees infected by *Phytophthora*

Dissemination of the environmental relevance of river corridors and social awareness in terms of socioeconomic benefits and ecosystem services provided.

Improvement of training/education and technical empowerment of the stakeholders involved in the management and conservation of river corridors.

The project lasts four years (2017-2021) and includes a system to monitor the impact of the actions on habitats and ecosystem services provided by river corridors.