



Reviving waters:

a conference on stream restoration

Hotel Lappland, Lycksele, Sweden 22-24 September 2014



**Conference
programme**

EC LIFE + programme
LIFE08 NAT/S/000266



**Havs
och Vatten
myndigheten**

Conference Programme: Reviving waters

Monday, September 22, 2014

10.00-13.00 Registration open

Introduction

13.00-13.15 Welcome and opening of the Conference. Fredrik Nordwall, Swedish Agency of Marine and Water Management (HaV) and Anders Esselin, Man & Nature

13.15-13.35 *What's so special about the Vindel River?* Prof. Christer Nilsson, Project Coordinator Vindel River LIFE

13.35-13.55 *An overview of the Vindel River LIFE project.* Johanna Gardeström, Project Leader Vindel River LIFE

13.55-14.00 Introducing session 1, Anders Esselin

Session 1. Getting your feet wet

14.00-14.20 *Practical restoration methods in the Vindel River LIFE project.* Daniel Holmqvist, Ume/Vindel River Fishery Advisory Board

14.20-14.40 *ReMiBar: Remediation of Migratory Barriers in Nordic/Fennoscandian Watercourses.* Ida Schönfeldt and Sofia Perä, Project Leaders EU LIFE+ REMIBAR

14.40-15.00 *Bending rivers by mussels.* Ivan Olsson, Project Leader UC4LIFE

15.00-15.30 Coffee

15.30-15.50 *Experiences of river restoration in Finland.* Anssi Eloranta, Central Finland ELY-center

15.50-16.10 *Restoring natural geomorphic process to river environments influenced by practical design constraints.* Hamish Moir, cbec eco-engineering UK Ltd

16.10-16.20 10 minutes for questions

6 minute speed talks, session 1

16.25-16.30 Introducing speed talks. Anders Esselin

16.30-17.10 ca

- *LIFE Triple Lakes – Catchment restoration and preventive action for aquatic habitats in a climate change perspective.* Ingemar Näslund, Länsstyrelsen Jämtland
- *Potential to enhance fish populations in the fragmented river system Motala ström. A feasibility study of fishpass installations and habitat improvements at multiple sites.* Peter Rivinoja, Sweco Environment AB & Sweco Energuide AB
- *The Ångerman River Project Part 3 (2014-2015).* Sara Friberg, Älvräddarna
- *Longer-term performance of bottom ramps to mitigate gravel habitat bottlenecks in a regulated lowland river.* Brandon Goeller
- *The steps in stewardship: Spring fens as the origin, source of inspiration and commencement for any reviving. Practical experiences from the central part of Moldanubic plateau.* Pavel Pokorný,

	Czech Union for Nature Conservation
17.10-17.25	Summarizing session 1: Questions and discussion
19.30	DINNER

Tuesday, September 23, 2014

8.30-8.35	Introducing session 2. Anders Esselin
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Session 2. Digging deeper

8.35-8.55	<i>Adapted forestry is needed after stream restoration.</i> Lennart Henrikson, Natur och Människa
8.55-9.15	<i>Brown trout spawning bed restoration: how complicated is it?</i> Daniel Palm, Vindel River LIFE
9.15-9.35	<i>Germination after restoration of flow regimes.</i> Judith Sarneel, Vindel River LIFE
9.35-10.35	Poster presentation and coffee
10.35-10.55	<i>Ecological monitoring of river restorations in Finland.</i> Pauliina Louhi, University of Oulu
10.55-11.15	<i>Good controls, time, adaptive management, and scale: factors affecting the scope and interpretation of stream restoration research in northern Sweden.</i> Eliza Hasselquist, Umeå University
11.15-11.35	<i>Restoration and monitoring work in the river Drava.</i> Tilen Basle, DOPPS – BirdLife Slovenia
11.35-11.45	10 minutes for questions
11.45-12.45	Lunch

6 minute speed talks, session 2

12.45-12.50	Introducing speed talks. Anders Esselin
12.50-13.40 ca	<ul style="list-style-type: none"> -<i>Habitat complexity and competition between yearclasses in salmonids; implications for stream management.</i> Johan Höjesjö, Gothenburg University -<i>Modeling erosion and longevity of artificial Brown trout (<i>Salmo trutta</i>) spawning beds caused by spawning activity.</i> Gustav Hellström, Umeå university -<i>Habitat compensation in nature-like fishways.</i> Stina Gustafsson, Karlstad University -<i>Evidence of recruitment failure in all life stages of <i>Margaritifera margaritifera</i>: non-destructive methods to better assess population status.</i> Martin Österling, Karlstad University -<i>River ice processes in channelized and restored streams.</i> Lovisa Lind, Umeå University -<i>Effectiveness of stream restoration for riparian vegetation and habitat.</i> Lenka Kuglerová, Umeå University. - <i>Red Listed species on Swedish freshwater shores.</i> Ulf Bjelke, Swedish University of

Agricultural Sciences

13.40-13.55 Summarizing session 2: Questions and discussion

Session 3. Wrapping it up

13.55-14.00 Introducing session 3. Anders Esselin

14.00-14.20 *Restore LIFE+ project – Building the knowledge base and sharing river restoration good practice.* Toni Scarr, project leader of RESTORE

14.20-14.40 *MulkearLIFE's community engagement in river restoration and catchment management on the lower river Shannon special area for conservation.* Ruairí Ó Conchúir, Project manager

14.40-15.10 Coffee.

15.10-15.30 *The Ångerman River Project.* Sara Friberg, Älvräddarna

15.30-15.50 *Water: connecting people. Building up a Life integrated project proposal for freshwaters.* Jari Ilmonen, Metsähallitus Natural Heritage Services

15.50-16.10 *The River Restoration Centre: encouraging river restoration in the UK and Europe.* Ulrika Åberg, RRC, UK.

16.10-16.25 Summarizing session 3: Questions and discussion

16.25-16.35 Wrapping up the presentations. Johanna and Christer

Session 4 (in Swedish) Presentation av projektet Vindel River LIFE

17.00-17.10 Välkomna! Anders Esselin

17.10-17.30 *Vad är det som är så speciellt med Vindelälven?* Christer Nilsson, projektkoordinator

17.30-17.50 *Projektet Vindel River LIFE.* Johanna Gardeström, projektledare

17.50-18.30 *Hur vi har arbetat med restaureringen i våra biflöden.* Daniel Holmqvist, teknisk koordinator.

18.30-18.50 *Uppföljningsarbetet: Hur påverkar restaureringen strandzonen och fiskens livsmiljö?* Johanna Gardeström, projektledare.

18.50-19.00 Frågor och avslutning. Anders Esselin

19.30 DINNER

Wednesday, September 24, 2014

8.45-15.15 ca Field trip to three sites restored by Vindel River LIFE. Bring appropriate clothing! Coffee and lunch will be served. We will make it back in time for the Stockholm flight.

Biographies of the speakers



Christer Nilsson. Professor of Landscape Ecology at the Department of Ecology and Environmental Science at Umeå University. My work revolves around the ecology of running waters and riparian zones. I am specifically interested in the capacity of stream ecosystems to recover after ecological restoration and in the effects of changing climates on arctic and subarctic ecosystems. I am the project coordinator in Vindel River LIFE.



Johanna Gardeström. PhD in Marine Ecotoxicology and have also done research on pesticide effects in agricultural streams. Since 2010 I work at Umeå University, in the Department of Ecology and Environmental Science, as the project leader of the 5-year restoration project Vindel River LIFE. In this role I am in charge of e.g., the project management, coordinating the different beneficiaries' work, informing stakeholders and the public about the project, and reporting the progress to the EU.



Daniel Holmqvist. Fisheries manager at Vindel River Fishery Advisory Board. My work is mainly focused on management of salmonids and river habitat restoration. I am the technical coordinator in Vindel River LIFE and I am responsible for planning and coordination of the practical restoration actions in the project.



Sofia Perä. Deputy project manager for the LIFE-project Remibar. The project is removing over 300 migratory barriers in streams in the Northern part of Sweden. I have worked as an aquatic ecologist for 14 years and I currently work at the County Administrative Board in Norrbotten.



Ida Schönfeldt. Project Manager of the LIFE-project Remibar. The project aims to remove over 300 migration barriers in streams in the Northern part of Sweden. I have worked as an ecologist for 16 years with various assignments and at the moment I am employed by the Swedish Transport Administration.



Ivan Olsson. PhD in aquatic ecology. My research, focusing mostly on fish migration issues, was conducted at the universities in Karlstad, Lund and British Columbia (post-doc). Currently, I am running the successful 50 MSEK LIFE-project titled "The thick shelled river mussel brings LIFE back to rivers" which aims to improve the water quality and habitat conditions in twelve rivers in southern Sweden and in Baltic Sea.



Anssi Eloranta. Fish biologist at the Centre for Economic Development, Transport and the Environment of Central Finland. I graduated from the University of Jyväskylä and since 1978 I worked as a specialist in limnological questions in the Finnish Environment administration. My main area of expertise is aimed at designing plans of river restoration and guiding the implementation of restoration measures in the field. Until now, about 200 riverine waters have been restored and 12 fishways built in Central Finland. I have also written some publications on the river restoration and trained pupils, students and hobbyists in the same subject.



Hamish Moir. Fluvial geomorphologist and managing director of cbec eco-engineering UK Ltd. I have more than 20 years' experience working in the water resource sector, both in research and consultancy capacities. I am a member of a prestigious research group on the topic of biophysical linkages in rivers and have been active in promoting the sustainable approach of 'process-based restoration'. I am also an Honorary Research Fellow at the Rivers and Lochs Institute at the University of the Highlands and Islands, helping to develop appropriate tools/ methodologies for the water resource (industry and regulatory).



Lennart Henrikson. PhD degree in ecological zoology (Göteborg University). I have been working as an ecologist at a local authority (Marks kommun) and at Swedish Forest Agency, and as a freshwater expert at WWF (Worldwide Fund for Nature). Today I am a consultant within my own company – Natur och Människa AB (Nature and Man Ltd). My focus has been nature conservation in a broader sense, but especially aquatic conservation and the fascinating Freshwater Pearl Mussel (*Margaritifera margaritifera*). During the last decades I have focused on water protection within forestry by e.g. training of forest owners and developing planning tools.



Daniel Palm. Fish biologist at the Swedish University of Agricultural Sciences where I have worked since 2002 and where I have conducted research on fish population response to restoration actions. I am currently involved in planning and coordinating fish monitoring in the EU funded project Vindel River LIFE. My main area of expertise lies within the field of juvenal salmonids, stream habitat and restoration.



Judith Sarneel. Spatial ecologist that applies ecological questions to questions related to restoration. After my PhD in which I disentangled the causes of the limited succession in fen ponds, and a post doc on the effect of re-introduction of water level fluctuations, I currently study the ecological consequences of 'Best Practice' restoration and more elaborate 'Demonstration' restoration, within the Vindel River LIFE project. Dispersal, recruitment and clonal expansion are three important focal areas of my research as those processes can induce vegetation changes after restoration.



Pauliina Louhi. Postdoc at the Department of Biology, Department of Oulu. I defended my thesis on ecological impacts of stream restoration and watershed drainage activities on benthic invertebrates and brown trout in 2010. My current project builds on previous work, but widens my research to include ecosystem functioning, the nature of the receiving community and experimental investigation of the effects of sediments and biodiversity on invertebrate community. I also works for Regulated Rivers Research Program run by Finnish Game and Fisheries Research Institute.



Eliza Maher Hasselquist. PhD student in Ecology & Environmental Science at Umeå University. I have applied experience working as a nature preserve manager in Southern California and in that capacity one of my roles were to conduct projects to restore degraded riparian, grassland, and shrub-dominated habitats. My academic background is in plant ecology and plant ecophysiology. For my PhD, I have conducted biodiversity studies on riparian plants and instream organisms, as well as evaluated nitrogen cycling and carbon sequestration in restored streams of different times since restoration.



Tilen Basle. As a volunteer my engagement with DOPPS – BirdLife Slovenia goes 15 years back and since then I have participated in numerous projects, actions and activities. This ranges from monitoring birds, project work to working with children and public. I have a bachelor's degree in Ecology with Nature Conservation and since 2014 I am working at DOPPS on the LIFE+ restoration project LIVEDRAVA.



Toni Scarr. Environment Manager for the Department of Energy and Climate Change in the UK. My work is to provide environmental advice to the government department and in particular to ensure the environmental case for minister's decisions on large energy projects. Prior to this role I was the project coordinator for the RESTORE EU LIFE+ project. RESTORE is a partnership for sharing knowledge and promoting best practice on river restoration in Europe. In my spare time I am attempting a PhD and I volunteer for the Royal National Lifeboat Institute and crew a lifeboat on the Thames Estuary.



Ruairí Ó Conchúir. Manager of MulkearLIFE. I have for 20 years worked in the field of conservation, land reform, agriculture and community based eco-tourism. I have spent a decade in Africa, mostly working in agriculture and land reform, and I returned home to Ireland in 2001. Since then I have worked largely in conservation related projects within Natura 2000 Network sites including 10 years in two award winning LIFE Nature projects – BurrenLIFE and MulkearLIFE. I live in the Burren and I am a director of a number of not-for profit companies including Mountaineering Ireland. I have a keen interest in landscape and wildlife photography.



Sara Friberg. Biologist with a background in soil biology and nature conservation who has always been interested in water. On the conference I will represent Ångermanälvsprojektet, where I am the project leader, and the funding possibilities through *Bra Miljöval*. My profession is to work for Cooperative Entrepreneurship and local development through the Coompanion Agency. This work goes hand in hand with sustainable river basin management. Earlier I worked with organic farming & gardening and at the County of Västernorrland with advise according to the enviromental law.



Jari Ilmonen. Metsähallitus Natural History Services (NHS) since 2012. NHS is a government-funded agency that manages and maintains the conservation areas in Finland. My duty in NHS is to coordinate and develop the conservation and inventory of freshwater habitats. Earlier I have worked with conservation and research of freshwater ecosystems, especially headwater systems. My speciality is aquatic entomology, and currently I am trying to narrow down the gap between science and practise in my work.



Ulrika Åberg. Restoration and information adviser at the UK River Restoration Centre where I have worked since January 2013, and where I support a range of advisory visits, assess river restoration works and provide technical advice. I am the editor of RRC's bi-annual Newsletter and I also manage the RiverWiki database. I am involved in planning and coordinating our technical training courses, workshops and member's site visits. I gained my PhD from the University of Leeds, UK. My main area of expertise lies within the field of eco-hydromorphology, and I am working on bridging the gaps between science and practice.