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Newsletter - ECRR,

European Centre for River Restoration

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European Centre for River Restoration

Secretariat:

National Environmental Research Institute

 Vejlsøvej 25, P.O.Box 314, DK-8600 Silkeborg, Denmark

 Tel + 45 89 20 14 00
 Fax + 45 89 20 14 14

 e-mail: ECRR@dmu.dk
 URL: http://www.ecrr.org

NEWSLETTER



From the editors

Newsletter at the Internet

It is now possible to download the ECRR newsletters from the ECRR home page at www.ECRR.org

If you have access to the Internet, please download future newsletters yourself. This will keep down postage expenses that could be used for other purposes promoting the cause of river restoration.

Please send an e-mail to the ECRR secretariat (ECRR@dmu.dk) if you do have access to the Internet and

will be able to download future newsletters. The Secretariat will then notify you by e-mail when future newsletters are published on the Internet.

European Centre for River Restoration

Second international ECRR conference: River Restoration 2000

The second international conference on river restoration arranged by the ECRR was held in the Dutch city of Wageningen in mid-May.

The attendance of more than 100 participants from 24 European countries, USA, China, Turkmenistan and Australia showed the immense current interest in river restoration - not only in Europe but also world-wide.

Previous conferences

The first European conference on river restoration was held in Lund in Sweden in 1991. Stream restoration was in its infancy, with much to be learned. Funding for river restoration was limited, meaning that only a limited number of projects were carried out, and there was also a serious lack of documentation of the ecological effects of restoration. To get the process started one of the main conclusions from the Lund

conference was: 'Don't hesitate and think too much – go do it!'

Much has happened since then. Restoration of rivers and their floodplains has been acknowledged by the EU as an essential tool for future improvements of degraded riverine ecosystems, and restoration is about to become an integrated part of European water management.

Considerable sums of money are currently being spent on restoring rivers. Since 1991, many projects have been carried out throughout Europe and much experience has been gained.

Establishment of the ECRR

The ECRR was established in1995 to support and enhance this development. One goal of the ECRR is to facilitate the exchange of information and bringing people together to share their expertise. An important way to do so is by arranging international conferences on river restoration.

First ECRR conference

The first International conference on river restoration arranged by the ECRR was held in Silkeborg in September 1996. The focus was on the ecological effects of various restoration measures in small lowland rivers, especially physical modification of watercourses and the consequent effects on habitats and biota. (The proceeding of that conference is available from the ECRR home-page).

Second ECRR conference - River Restoration 2000

Although river restoration has seen considerable progress, there are still many obstacles to overcome, technical as well as bureaucratic.

The recent conference 'River Restoration 2000 - Practical Approaches' in Wageningen focused on the practical approaches in river restoration. The conference provided information on many aspects on river restoration, from presentations, workshops and discussions, keynote lectures and poster sessions. In addition, the conference excursion gave the opportunity to visit a number of Dutch restoration sites. Abstracts from the presentations are available on the ECRR home-page where the proceedings will also appear soon.

Another goal of the conference was to contribute to the development of the ECRR pan-European network. One of the immediate future tasks for the Centre will be to further build up this network and to establish national centres throughout Europe. This will further commit participants to actively take part in the ideas behind the centre.

ECRR logo

The official logo of the European Centre for River Restoration was presented at the conference in Wageningen:



It will be used in future communications from the Centre.

Draft conclusions

At the end of the conference a number of general key messages on the way ahead in river restoration could be concluded, and some present strengths, weaknesses, opportunities and threats could be identified.

A regional workshop had drawn up a number of special considerations reflecting different trends, problems and solution options regarding river restoration in different European regions: the Southern, Eastern and Western regions of Europe.

A set of priorities on how to enhance river restoration on a national and EU level was set down. Likewise, a number of priorities for the future work of the ECRR were outlined.

Last – but certainly not least – the conference closed with a request for personal action of the participants of the ECRR.

As the overall conference conclusions and recommendations are currently debated, the following is a draft version of these conclusions and recommendations. The ECRR invites everybody to comment on them through the ECRR secretariat at ECRR@dmu.dk. The debate will continue on the ECRR home-page and in coming issues of this newsletter.

CONCLUSIONS - Some Key Messages

- There should be no regrets and no recriminations One should act now if a 'win win'-situation is to be achieved
- Provide 'Space for the river' Recognise the need and share it
- Integration of interests should be eased Find alliances at operational, functional and community levels
- Understanding the benefits Nature/biodiversity; Water quality and purification; Flood defence; Water resources; Fisheries/angling; Forestry; Agriculture; Hunting; Recreation; Economics (local, regional, national, international)
- There is a need to get the 'benefit' messages across We all have a role to play
- Sustainability and processes Solutions must be sustainable and restore elements of 'function'
- Avoid disasters Value more what we have, protect the best and do not wait for disasters to trigger projects
- Commonality ALL the above apply to all European regions, but...
- Priorities and needs do vary Recognise this and help each other

CONCLUSIONS – Present Strengths, Weaknesses, Opportunities and Threats

Strengths

- · People are enthusiastic
- External support collaboration, people and legislation
- Funds (internal and external)

Weaknesses

- Aspirations often too modest
- Insufficient analysis and understanding of constraints
- Understanding scale of cost/benefit linked to objectives

Opportunities

- · Harnessing of energy and enthusiasm
- Linkage of benefits for all through river restoration
- Multi-functional involvement

Threats

- Need for space and lack of recognition
- Short-term focus or public rejection
- · Costly delivery of promises by not sharing

SPECIAL CONSIDERATIONS - Southern Europe

Climate Leads to dry rivers and flash floods; land-use and irrigation.

Dams Too common – Destroyed geomorphology/hydrological regime - restoration can only

be partial; Destruction of riparian forest.

Approaches Philosophy is traditional 'engineering' - constraint to ecological alternatives.

Assets Few unspoiled rivers and specialised species left; Pressures are great and protection

is poor

Priorities Ring the alarm bells - Prevent further destruction; Promote positive use of funds;

Promote restoration of dynamics; Use EIA and public awareness to save and restore

natural values.

SPECIAL CONSIDERATIONS - Eastern Europe

Pressures Unique, due to rapid economic adjustments and pressures.

Actions Need small-scale approaches to foster wider adoption.

Priorities Still retains good/pristine examples on what most of Europe has destroyed - priority

is protection in combination with socio-economic development.

Awareness Stakeholder interest is growing and they are developing their own perspective. There

is a need of demonstration projects to kick-start internal development of concepts and

benefits.

Quality Special need for co-ordination of European Water Quality Standards.

SPECIAL CONSIDERATIONS - Western Europe

Understanding Need to improve measurement of effects of activities – ecological,

hydrological/geomorphic processes, economic etc.

Language Much activity - but lack of common terms hinders understanding and sharing.

Information Much information - but still poor exchange within same countries and across

boundaries. Have better co-operation between organisations, publish more and then put

theory into more practice.

Links River restoration needs better funding and operational links to economics and water

management.

PRIORITIES - National and EU Level

Recognition Get principles of river restoration officially adopted as an integral part of NATIONAL water

management.

historic practices that evolved in harmony with nature.

Frameworks Influence and use directives - e.g. Water Framework - Physical quality objectives as

well as water quality.

Awareness Ring alarm bells on losses; develop awareness and training to deliver integrated,

sustainable and multi-use management practices and projects.

Trans-boundary Further co-operation of national centres and trans-boundary initiatives important for whole

of Europe.

PRIORITIES - ECRR

Networks - Help existing <u>Centres</u> operate more effectively and help new ones develop.

- Encourage individuals and organisations.

Demonstration sites - Promote more sites to raise awareness and learning.

- Facilitate better value for money from investments.

Facilitate - Regional needs, e.g. dam management options for Southern Europe.

- Encourage adoption of water quality standards across Europe.

- Promote pilots in Eastern Europe.

Promote - Integrated catchment approaches to problems and understanding of land-use influences.

- Public awareness of Benefits at local, national and eco-regional scales.

- Public awareness of **Problems** of dis-functioning systems.

Inventories Of valuable rivers and floodplains requiring protection and priorities for rehabilitation.

Documentation Facilitate access to 'solutions', manuals of techniques, case studies (of negative and

positive actions and pressures), reference conditions etc.

ECRR Plan for Future Work

The EU LIFE programme financially supports the establishment of the ECRR. The support runs out in April 2002. During this 'LIFE' period the ECRR plans to:

- Establish a home-page and different databases
- Issue newsletters
- Organise conferences and workshops
- Facilitate development of networks working with river restoration

Subsequent to the termination of the LIFE funding period in 2002, funding is anticipated to be found elsewhere. The plans of the ECRR after LIFE are to:

- Short term:
- Accelerate actions and disseminate information
- Improve value and awareness of demonstration projects Technical, environmental, economic, social etc.
- Extent databases on people, institutions, projects
- Promote
- Research and monitoring
- Funding opportunities
- Project partnerships
- Assessment of needs
- Training
- Long term options are being developed
- Your involvement is strongly invited as YOU are the ECRR!!!

Conference Impressions from across the Pond

By Matt Kondolf, University of California, USA. E-mail: Kondolf@uclink.berkelev.edu

I feel very lucky indeed to have been invited to participate in the River Restoration 2000 conference. Having attended the 1996 conference, it was particularly interesting to see the progress in various projects, and the continued evolution in thinking about how to approach restoration. The emphasis on restoring fluvial process (where there is sufficient stream—power) is an important trend and one that is increasingly recognised by restoration practitioners in the US.

Differences in restoration

As representative from the western hemisphere, there are a number of differences in social and political context for restoration. These include the stronger tradition of countryside planning in Europe, and the apparently greater willingness of individuals to submit to limitations on their private property rights for the greater good. From my experience, in the US (and in some Asian nations such as Taiwan), the strong 'cowboy' attitude makes catchmentlevel planning and implementation more difficult. The Calfed restoration program in California relies on

heavy infusions of public funds to compensate all parties for any conceivable loss of land value.

Many similarities as well

There are many similarities as well, especially if one views California as a Mediterranean country, with highly seasonal precipitation, episodic flow regimes, extensive flow regulation by reservoirs, and profound alterations to the sediment budget from dams and gravel mining.

Just as southern European countries struggle with EU directives from Brussels, California must try to apply federal directives from Washington that reflect a humid, Atlantic climate view of the world, often poorly suited to the distinctive Mediterranean hydrology. For example, definitions of wetlands have been much debated because federal definitions have not captured many highly seasonal but ecologically important habitats in California.

I was very impressed with the attendees from eastern European nations, and was inspired by their ongoing efforts at environmental conservation, and was reminded of the scale of the imminent threats to ecosystems in this region, and also the potential for preservations and restoration of large ecosystems.

The Dutch way

The Dutch restorations were impres—sive not only for their ecological success, but for the broader public acceptance and support for environ—mental stewardship they imply. In conversations with strangers else—where in the Netherlands (an admittedly non-scientific sampling), I found people to be far more aware of their rivers and ecological conservation than would be the case in California.

The conference setting - with its view of the Neder Rhine, its ready access to the floodplain, and the surrounding forest - was superb and the service, meals, coffee, etc were excellent.

Congratulations to the organisers and I look forward to the proceeding volume.

Conference Impressions from a German Participant

By Dr. Ludwig Tent, Hamburg. E-mail: Ludwig.Tent@gmx.net

How to organise a splendid conference? The Dutch RIZA knows! You choose a place elaborated by the glacial ages and the following periods so that you have a hill next to a plain lowland area. On top of this hill, you find a congress hotel with a terrace towards the wetlands and a sunset with colours on the plains like those of ancient landscape drawings, and you make an agreement of nice weather with St. Peter – from sunny 30 °C to the more normal 15 °C with some showers.

Can one expect more? – Yes. A conference programme filled with all topics of watershed related restoration work from headwaters and small brooks to the really huge rivers like Volga, Don and the Yellow River.

Fascinating start

To have a really good start, artists gave their impressions of water and fascinated the congress participants with a minute of meditation back to "the river of one's childhood". Great! And the inspiring conference continued in the same way. Let's not forget the "charismatic megafauna" (no, not you Erik, but thank you very much, Mr. Chairman, you managed to wake up everybody in the morning and still be engaged at the end of the evening), such as trout and salmon during the presentations and semi-wild horses and cattle during the excursion.

A living network

Apart from the different local and regional aspects of the presentations, posters and discussions during the conference, many similarities and necessities became obvious. It is good to have a living and learning network enabling us to discuss the way from idea via plan to realisation of restoration. Practical approaches, including a description of the highlights as well

as failures, were presented freely to avoid the same mistakes being made elsewhere. We learned that apart from our specific knowledge, a good project is characterised by partnership and co-operation, involvement of stakeholders (for some of us, "new" groups may arise like hunters, anglers, special firms or companies) and with this perhaps additional funding.

Lack of funding

With funding we have the topic of lack of money – but, surely, there is enough money. We only need to realise where it is. Much of it is in the hands of landscape and catchment destroying agencies, e.g. ruled by the EU definitions of agricultural subsidies. So we are back to the themes of many presentations of non-sustainable land use and maintenance practices: vast area and bank erosion causing part of "our" river problems. (Does the taxpayer really know where his/her money goes?). Wise use, as cited in many discussions, is one of the first steps of redirecting the paths of this monev.

We heard about many examples throughout Europe where profits of engineering works of the past clearly did not counterbalance losses. The efforts in restoring the Danube delta is but one of these good examples of how to revert things. The question whether we learn from our mistakes. in these case studies has been answered with very satisfactory results. Other studies revealed possibility of combining flood protection or reconstruction works (e.g. of weirs, bridges) with restoration goals. In many situations, an idea of "river health" brought to the public would help.

Nevertheless, we have to admit that destruction still exceeds restoration. Our bus trip to the excursion sites showed the reality with intensive

agricultural practices without "green" belts and erosion prevention including use of pesticides and fertilisers to the very river edge.

Future ECRR conferences

Thank you very much, all organising activists of ECRR and RIZA. To keep this living network alive there should be a follow-up conference in about four or five years. Which member(s) will initiate the tremendous but challenging task of work ahead? Where shall we meet? Hearing about so many different aspects and specific problems would no doubt be a good reason to meet in a south-western or south-eastern European country.

What would I like to see at the next ECRR conference? I would like to see that things have been attacked persistently on a catchment basis with more publications on the psycho-sociological context. Drawbacks should be discussed more freely so that they act as a constructive lecture instead of depressing aspects - and particularly. I wish that we were able in the meantime to integrate themes like land use, watercourses maintenance and definitions of EU subsidies with their nowadays detrimental effects on our waters.

At the moment we discuss only a small part of the watercourses: the bigger ones directed through ownership etc. by administrations. The vast majority of stretches are the responsibility of local villages etc., where, globally, only a few attempts of sustainable development are seen.

Perhaps some of us will meet at another Wageningen congress in October 2000 and start these discussions: Agricultural Effects on Ground and Surface Waters. More information on that conference at www.alterra.wageningen-ur.nl

Projects

Towards some guidelines on managing river flows to enhance and restore floodplain forests

By Francine M.R. Hughes and Keith S. Richards, University of Cambridge, UK. E-mail: fh13@hermes.cam.ac.uk

We would like to initiate some discussion on the way in which river flows can be managed in order to enhance or restore floodplain forests, where this is considered desirable. Our interest in this topic stems from many years of research work on the linkages between hydrology, sedimentation patterns and woody vegetation on floodplains.

FLOBAR 1

We are part of a project called FLOBAR (FLOodplain Biodiversity And Restoration) which has received funding from the EU. Other partners are the University of Grenoble and CNRS-Toulouse (France), and the University of Umeå (Sweden).

The first FLOBAR project carried out studies in the UK, France, and Sweden on many aspects of the connections between river flows and the regeneration of woody riparian species.

For example, we studied the recharge of floodplain sediments both by rainfall inputs and through flooding, the regeneration patterns of tree species associated with soil moisture availability, the distribution of micorrhizae along soil moisture gradients on floodplains. We also studied the response to moisture availability of male and female individuals of some willow and poplar species and the use of water by trees on floodplains. Our methods have involved field monitoring of hydrology and vegetation, field experiments, greenhouse experiments and numerical groundwater modelling.

Findings

All our findings (and the findings of many other researchers in this field)

show very clearly that a number of factors are vital in the initiation and maintenance of trees on floodplains:

- In order for the regeneration of woody species to occur on a floodplain some channel movement is necessary. In this way new sedimentation sites suitable for the regeneration of early successional tree species (frequently members of the Salicaceae family) are created.
- 2. Flooding events are periodically necessary to both cause channel movement and recharge floodplain water tables. Although floods cause the death of individual trees they ensure long-term survival of floodplain species by creating regeneration opportunities. Without floods only species which can cope with drier conditions survive on a floodplain.
- The rate at which water tables drop following a flood event will determine whether or not tree seedlings survive in any season. Some species can reproduce vegetatively even when seedlings cannot survive but in evolutionary terms this is not a sustainable strategy.
- Unseasonal flooding events (from whatever cause) can prevent successful tree regeneration in any season.

FLOBAR 2

We have recently begun a new project (FLOBAR 2), again with EU funding.

In it we are continuing to study many natural science aspects of

floodplain ecosystems. In order to produce usable guidelines on how to take the water needs of floodplain woodlands into account we need to integrate this research with an understanding of the complex and changing institutional situations within which river restoration takes place. To help us with this task we have included a research group from Canada (University of Lethbridge) which has North American experience with the practicalities of manipulating river flows to enhance floodplain ecosystems. We have also included a social science group from Germany (The Institute for Regional Development and Structural Planning) with experience in the institutional dimensions of water management at a catchment scale.

In order to produce guidelines that are both applicable and transferable to many different types of European rivers it is our aim over the next three years to seek the views of stakeholders involved in water management and river restoration.

If you are interested in our proposed guidelines we would be very interested to hear from you. We hope to keep you up to date with progress through the occasional item in this newsletter and through our web-site.

The results from FLOBAR 1 can currently be viewed at www.geog.cam.ac.uk/intro/activ/flood/flood.htm

A new web-site regarding FLOBAR 2 will soon be established on www.geog.cam.ac.uk/research/
FLOBAR2.htm

Restoration of the River Skjern – Denmark's largest restoration project

Hans Ole Hansen, Danish National Environmental Research Institute, Denmark. E-mail: HOH@dmu.dk

For the next three years, one of the largest nature restoration projects in northern Europe will be carried out in Denmark. The largest Danish river, the Skjern River, is to regain its old meanders.

Until the 1970s there was a general consensus in Denmark to subsidise projects that gained arable land. Today, this situation has changed and many Danish rivers are being remeandered.

The latest, and last, major Danish drainage project was carried out in the downstream 18 km of the River Skjern Å in the late 1960s. 4,000 ha of meadows and marsh were transformed into arable farmland.

New times

Today, 30 years later, 2,200 ha of that land are to be turned back into meadows and marshes and the channelised river will be converted into a 26 km long meandering river. Between 1999 and 2002, the valley will see major construction projects and nature care programmes.

Totally, the restoration will cost about 30 million EUR - which, converted into 1960s money, was about the same amount that was used for the 1960s drainage project.

Project objectives

By restoring the natural meanders of

the river and allowing it to break its banks and flood the meadows the project will create a patchwork of ponds, meadows, reedbeds and meandering watercourses. This large area of undisturbed wetlands will improve the habitats for numerous species of birds and animals that have been on the decline almost for as long as can be remembered -for example the bittern, the otter, the black tern and the corncrake. The project will also improve spawning and nursery conditions for fish such as the local wild stock of Atlantic salmon, which has been close to extinction.

Raised groundwater levels will stop the soil processes that lead to leeching of ochre. When the river runs high, it will be allowed to flood the neighbouring meadows, where much of its content of nutrients, mostly from agriculture and fish farming, will be deposited and assimilated by the plants of the meadows. These pollutants would otherwise have ended up in Ringkøbing Fjord, with a negative impact on the environment.

The project will also improve the potential for leisure activities and tourism.

Monitoring programme

A monitoring programme will follow the physical, chemical and

biological changes throughout the project. The Danish National Environmental Research Institute is responsible for the monitoring. A WEB-site describing the main findings will be established later this year.

Much to see

The restoration work was started at the river mouth in the fjord in 1999. The work will be carried out in three stages, and water will be admitted as each stage is completed in autumn 2000, 2001 and 2002, respectively.

There will be a great deal to see both whilst the construction work is in progress and in the subsequent years. Information of the project and the changes in the countryside will be provided continually through exhibitions, bulletin boards and brochures. Access to observation sites will be kept open with paths, car parks and lookout towers. At the WEB-site

www.sns.dk/natur/netpub/skjernaa/p arkering.htm you will find an overview map showing the project area with parking lots, vantage points, information boards etc.

Further information and bookings for nature tours is available from Oxbøl National Forest District, Ålholtvej 1, DK-6840 Oksbøl, Denmark. Telephone: +45 76 54 10 20.

Short notes

Trout in the City of Hamburg?

Dr. Ludwig Tent, Hamburg, Germany. E-mail: Ludwig.Tent@wandsbek.hamburg.de

Trout 2010 is a German pilot project wishing to restore an urban brook, the Wandse, from its present sluggish canals into turbulent and productive waters.

Friends of the Earth acts as project manager, the Umweltstiftung der

Hamburgischen Electricitätswerke is the main sponsor, Adopt-a-Brook groups act as the active restorers and the administration of the Borough of Wandsbek leads the project.

More information on the engagement of pupils etc. at: www.globe-germany.de/schulen/gyra/forelle2010

Further questions can be addressed to Dr. Ludwig Tent.

Conference on Waterways and Sustainable Development

An international conference on waterways and sustainable development has just been held in Königswinter, Germany with the aims to:

- create a discussion among the various stakeholders of the ecological, economical, social,
- and political aspects of waterways
- develop key concepts for sustainability in waterway operation
- develop a common position of all NGOs facing decision makers.

More information on the conference, its conclusions and recommendations may be found on the WEB-site: www.wwf.dk/ freshwater/pdf/waterways-res.pdf

Conferences

The Centre has received information about the following international conferences with relevance to river restoration. Further information can be obtained by writing to the e-mail addresses provided.

Wetlands for the 21st century

Québec City, Canada 6-12 August 2000

Themes include sustainability of wetland and biological resources, wetland restoration technology and more. The mission is to foster the understanding and sustainability of the World's peatlands and wetlands through promotion of positive interactions by the many stakeholders involved nationally and internationally in wetland and peatland science, policy, management, wise resource use and regulation.

For more information URL: www.cqvb.qc.ca/wetland2000

International Workshop on Development and Management of Flood Plains and Wetlands (IWFW 2000)

Beijing, China 5-8 September 2000
The central themes of the workshop are the development and management of flood plains and wetlands – strategies, technology and practice.
For more information e-mail Mr.
Jiang Chao at:
irtces@public.east.cn.net

12th International Trout Stream Habitat Improvement Workshop

Waterville Valley, New Hampshire, USA 11-13 September 2000

The workshop will provide overviews of current techniques in river restoration on a national and international basis.

For further information: URL: www.nhcfc.org/conference.htm

FBA annual scientific meeting

University of Birmingham, UK 14-15 September 2000

The meeting will focus on how we can use current knowledge to understand fundamental ecological processes and to predict ecological change. The dynamic in ecology between understanding and prediction will also be addressed.

E-mail: sage@fba.org.uk

International Conference on Agricultural Effects on Ground and Surface Waters

Wageningen, the Netherlands 1-4 October 2000

The objective is to contribute to the prevention or reduction of freshwater scarcity and water pollution caused by agricultural activities, especially under moderate climatic conditions.

More information at URL: www.alterra.wageningen-ur.nl

28th SIL Congress

Melbourne, Australia 4-10 February 2001

The following topics are likely to be covered in the congress: Restoration ecology of waterbodies, Physics of water movements, Water chemistry, Water plants, Benthic invertebrates, Fish and fisheries, Reservoir and river management, Ecotoxicology and pollution, Modelling of aquatic ecosystems, Ecology of streams and rivers, Catchment studies, Limnology of specific waterbodies, in water treatment and of arid areas.

For more information URL: www.monash.edu.au/oce/sil2001

Publications and videos

Publications

The Centre has received information about the following publications with relevance for river restoration.

Boon, P., Davies, B.R. & Petts, G.E. (Eds.) (2000):

Global perspectives on river conservation – Science, policy and practice. – Wiley, UK.

The book reviews the current state of river conservation worldwide, providing a regional assessment of conservation strategies and practices, and then uses this approach to provide a synthesis of the opportunities and constraints for continued and improved conservation and management of rivers. Price 125 £.

More information at URL: www.wilev.co.uk

Madsen, B.L. & Tent, L. (2000): Lebendige Bäche und Flüsse – Praxistipps zur Gewässerunterhaltung und Revitalisierung von Tieflandgewässern. – Libri - Books on Demand (www.bod.de). ISBN 3-98911-546-1.

The Danish book "Danish Watercourses – Ten Years with the New Watercourse Act" by Bent Lauge Madsen has now been translated into German. Dr. Ludwig Tent, Hamburg, translated the text and reorganised parts of it, leaving local Danish examples but also including information on specific German lacks of knowledge. The German translation is a non-profit-task funded by the Edmund Siemers-Stiftung, Hamburg. Price 24.84 DM.

In addition to the German edition the book is available in English (www.mst.dk/DocLibrary/pdf/87-7810-344-4.PDF), Spanish (www.mst.dk/DocLibrary/pdf/87-7810-613-3.PDF) and Danish (www.mst.dk/DocLibrary/pdf/87-7810-379-7.PDF).

Mainstone, C.P. (Ed.) (1999):

Chalk rivers – Nature conservation and management. English Nature and the Environment Agency.

This handbook is a holistic appraisal of the ecology, threats and management of chalk rivers, containing information and ideas on a range of restoration issues. Price 10 £.

To order, e-mail English Nature at reception @telelink.co.uk

Mainstone, C.P., Parr, W. & Day, M. (Eds.) (2000):

Phosphorus and river ecology – Tackling sewage inputs. - English Nature and the Environment Agency.

This document provides information on a range of issues regarding phosphorus. It should help to provide an objective basis for developing phosphorus control programmes for point source loads to rivers.

To order free of charge, fax Telelink at: +44 1 329 330 034.

Pruijssen, H, van Rheenen, J. & Hollander, L. (2000):

Working together with nature in the Dutch river region - Dienst Landelijk Gebied.

The booklet describes 27 different nature development projects in the Dutch river floodplains. Its main intention is to provide the reader with a reasonable impression of what has been done and to show the results of co-operation in the river region.

To order, fax Dienst Landelijk Gebied at +31 26 378 1250.

Smits, A.J.M., Nienhus, P.H. & Leuven R.S.E.W. (Eds.) (2000):

New Approaches to River Management. - Backhuys Publishers, Leiden, NL.

Proceedings from a conference held in 1998 in Nijmegen, NL. It includes twenty papers on river basin management including examples from across Europe but also Missis sippi, the Pantanal and the Mekong (integrated river basin management; participation of stakeholders, new methodologies and instruments) and a discussion chapter.

It can be ordered in any bookstore under ISBN 90-5782-058-7.

Zöckler, C. (2000):

Wise use of floodplains – Review of river restoration projects in a number of European countries – A representative sample of WWF projects. – WWF European Freshwater Programme.

This review addresses the following questions in particular: What are the lessons learned in planning, implementing and constructing river restoration? What role does WWF play? What are the ecological, social and economic benefits of the wise use of rivers? What and where are the major constraints to river restoration in Europe?

Available from the Internet at: <u>www.wwf.dk/freshwater/</u> <u>RiverRestoration.pdf</u>

The following three publications are now available on the Internet through the publication link at the ECCR home-page: www.ECRR.org

Hansen, H.O. (Ed.) (1996):

River restoration - Danish experience and examples. - NERI, Denmark. 99 pp. (In English, Spanish and Danish).

Hansen, H.O. & Madsen, B.L. (Eds.) (1997):

River Restoration '96 - Plenary Lectures. International conference arranged by the ECRR. - NERI, Denmark.

Hansen, H.O. & Madsen, B.L. (Eds.) (1998):

River Restoration '96 - Session Lectures Proceedings. International Conference Arranged by the ECRR. – NERI, Denmark. 293 pp