

Monitoring Stream and Watershed Restoration edited by *Philip Roni*.

Wallingford: CABI Publishing, 2005, 350 pp glossary, refs and index, £40.00

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Acknowledgement that streams, rivers and their catchments have suffered a long history of degradation, and recognition that environmentally-sensitive river management can provide solutions to these past ills have led to a rapid growth in demand for the implementation of river and catchment restoration projects. As scientific research has tried to keep pace with this demand, previous publications have informed the debate by focusing on the need for restoration and the techniques that have been applied (Boon *et al.* 1992; Harper & Ferguson 1995; Brookes and Shields Jr. 1996; Cowx and Welcomme 1998; de Waal *et al.* 1998; Boon *et al.* 2000). A common theme that emerges from these previous works is the recommendation for post-project appraisal and monitoring, to enable future restoration projects to learn from the successes and mistakes of previous enhancement work. Until the publication of this book however there has been no useful guide to inform the decisions of scientists evaluating restoration projects, practitioners implementing restoration, and public and private bodies funding restoration on how to go about this. Therefore this book fills an important gap in the published literature regarding the practice of river restoration.

The book is organised into 12 edited chapters that provide guidance on monitoring restoration that is relevant across a range of spatial scales, from individual site-specific actions, e.g. small-scale habitat enhancement projects to catchment wide approaches that involve multiple projects. Together they span methods for monitoring the

physical, chemical and biological responses to habitat restoration. By the authors own admission, there is a strong bias towards temperate North American streams and restoration practices that influence salmonid fish, with case study material coming almost exclusively from this region. This does somewhat limit the scope of material presented, as many other nations have developed their own distinctive physical and biological sampling protocols that offer alternative solutions and approaches. Incorporation of these would via case study material from outside North America, or at least consideration of these alternatives and their significance within the discussion sections of each chapter would have broadened the perspective and scope of the book and heightened it's international relevance. Nevertheless, the basic principles of the monitoring protocols covered should still apply elsewhere.

In summary, a useful book for scientists and practitioners alike, that is likely to become a key source of information for those involved with the design and implementation of river and catchment restoration projects.

Boon PJ, Calow P and Petts GE eds 1992 *River Conservation and Management* Wiley, Chichester.

Boon PJ, Davies BR and Petts GE eds 2000 *Global Perspectives on River Conservation* Wiley, Chichester.

Brookes A and Shields F D Jr. eds 1996 *River Channel Restoration* Wiley.

Cowx IG and Welcomme, R.L. eds 1998 *Rehabilitation of Rivers for Fish Fishing*
New Books, Oxford.

de Waal LC, Large ARG and Wade PM 1998 *Rehabilitation of Rivers: principles and implementation* Wiley, Chichester.

Harper D and Ferguson AJD 1995 *The Ecological Basis for River Management*
Wiley, Chichester.

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