T. Hirose (ed): The restoration of nature in Japan—a challenge to ecological engineering (translated by Jiro Kikkawa)

Tokai University Press, 2010, 180 p

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Received: 11 November 2010 / Accepted: 17 November 2010 / Published online: 23 December 2010
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The Restoration of Nature in Japan was published in May 2010 and may serve to increase our knowledge of the management of natural landscapes. Although the international journal *Landscape and Ecological Engineering* publishes scientific findings and knowledge on the restoration of natural environments in Asia and other countries, there has been no textbook written in English introducing principles and examples of restoration projects in Japan.

This book is a translation of a Japanese textbook that was published in 2007. First, the basic concept of ecological engineering is explained. Second, environmental conservation and nature restoration activities in Japan are introduced for various fields, including river management, sediment control, road construction, urban parks, agriculture, forestry, coastal policy, fishery, and natural park services. Finally, 12 sites are chosen to examine the effects of restoration measures, the ways in which we can evaluate projects, the type of problems that remain, and what we can learn from the experiences of these restoration projects. These examples include many pictures and figures that help readers to understand the concepts involved in restoration projects and how to assess their progress.

Attention is particularly focused on the authors of this book, as most of them are consulting-company employees rather than scientists in research institutes. Thus, various technical matters and restoration measures are introduced that could feasibly have consultancy and real-world applications. The main role of consultants is to propose

reasonable restoration plans and concrete measures to local or national governments as opposed to exploring basic processes and mechanisms in target ecosystems. If we do not act without complete understanding of the controlling factors in a target ecosystem, conservation and restoration projects cannot make any progress. The authors are making efforts to implement restoration projects using concepts of Adaptive Management.

However, there are a number of issues that are not addressed in this book. The laws and government rules outlined in Chap. 2 have been changing rapidly, and other, recently launched, restoration projects are not included. Also, the effects of global warming on vulnerable ecosystems such as alpine mountain areas are not discussed. In particular, the evaluation of biodiversity and ecosystem health may be highly important issues, but they are not fully covered in the book. I would hope that there will be future progress in this regard.

Although the contents of this book are similar to those of the Japanese version, potentially ambiguous Japanese expressions and government terminology have been greatly improved by an accurate translation. I would recommend this book to scientists and foreign students as well as to government administrators and consultants who wish to study ecological engineering and restoration in Asian countries and who may publish their efforts in international journals such as *Landscape and Ecological Engineering*.

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