200062, China, xychen@des.ecnu.edu.cn). **Biological Conservation** 150(1):1–4.

In long-lived species, recovery of populations throughout a wide geographic distribution may not necessarily indicate self-sustainability. As an example, the dawn redwood (*Metasequoia glyptostroboides*) is one of the most successfully recovered endangered plant species based on number of individuals. However, populations exhibit very low genetic variability, which suggests that their ability to naturally regenerate is limited. Li and colleagues found that seed masses and germination rates of restored dawn redwood populations were significantly lower than natural populations, likely due to inbreeding depression. The authors use the data to highlight the role of population viability analyses play in assessing protection levels for imperiled species.

Economics & Ecosystem Services

Finding Common Ground for Biodiversity and Ecosystem Services. 2012. Reyers, B. (Council for Scientific and Industrial Research and Department of Conservation Ecology and Entomology, University of Stellenbosch, South Africa, breyers@csir.co.za), S. Polasky, H. Tallis, H.A. Mooney, and A. Larigauderie. **Bioscience** 62(5):503–507.

Reyers and colleagues address the intense debate over the use of ecosystem services as a strategy to promote biodiversity conservation. Opponents of this approach often criticize the advertisement of ecosystem services as a distraction to the true mission of biodiversity conservation. The authors explore both sides of the debate and cite that the lack of common ground appears to derive from narrow interpretations of metrics, values, and management. The degree of discordance depends much on the relationship between ecosystems and biodiversity and how

Economic Valuation and Conservation: Do People Vote for Better Preservation of Shadegan International Forest? 2012. Kaffashi, S. (Environmental Economics, Faculty of Environmental Studies, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia, sarakafashi@gmail.com), M.N. Shamsudin, A. Radam, M.R. Yacob, K.A. Rahim, and M. Yazid. **Biological Conservation** 150(1):150–158.

Kaffashi and colleagues use the Shadegan International Wetland (SIW) in southern Iran as a case study to demonstrate the use of a choice experiment (CE) survey to estimate nonmarket ecological services of wetlands. The authors developed a questionnaire instructing respondents to rank the condition of the following nonmarket attributes of SIW: natural scenery, water quality, biodiversity, ecological functions, and price. Responses were then entered into a (RPL) model to derive the marginal value of the attributes.

Book Reviews

Restorative Commons: Creating Health and Well-being through Urban Landscape

Lindsay Campbell and Anne Wiesen (eds). 2009 (revised 2011). Newtown Square, PA: USDA Forest Service. Online only. www.nrs.fs.fed.us/pubs/gtr/gtr_nrs-p-39r.pdf. ISBN-13: 978-0-16-086416-2. 278 pages.

Intuitively believing that "green" is good does not necessarily convince fiscally strained administrators and developers to invest in open space as a social and environmental necessity. Moving beyond intuition to facts, we have at least 30 yr of research—from the seminal works by Roger Ulrich and the Kaplans to more recent studies—that document significant emotional, psychological, and physical health outcomes of human-nature interactions. From the environmental science and design fields, we know that our many of our pressing environmental problems, such as urban heat island effect and localized urban flooding, can be addressed through green infrastructure that reintroduces hydrologic systems, ecological processes, and habitat. Public health officials and medical experts encourage active living and local community food security measures to address our obesity epidemic and associated high blood pressure, heart disease, and other health risks. With research findings in hand and our needs so vividly present, it may be that our ability to successfully and tangibly promote healthful open space hinges on enabling inspiration and grounded confidence—in other words, knowing that others have succeeded and that we can participate in positive change as well. *Restorative Commons: Creating Health and Well-being through Urban Landscapes,* is a shot-in-the-arm for the "green is good" campaign through emphasis on community-based civic stewardship as a proven means to promote individual, community, and environmental health.

The book grew out of the Meristem 2007 Forum, "Restorative Commons for Community Health," convened at the New York Academy of Medicine (New York, NY) and attended by leaders and practitioners from health, design, and urban natural resource management fields. The goal of the forum was to give specificity and meaning to the concept of restorative commons, or public space conducive to individual and community health. The consequent published collection of essays, produced through a joint endeavor of Meristem and the U.S. Forest Service Northern Research Station (Newtown Square, PA), provides a suite of research-based and reflective perspectives from researchers, designers, and organization directors. To enable different approaches and story-telling styles, the book is organized

under the headings of theory (what we know), thought pieces (what could be), case studies (what is going on), and interviews (what individuals are doing). The diversity within the text is matched by a graphic organization energized by sectional color highlights, multiple font sizes and types, and color illustrations. While the essays work independently, the editors also highlight connections through a clear introduction and cross-references in the margins.

The forward by Oliver Sachs, MD, who gave the keynote at the Meristem 2007 Forum, sets the context by attesting to the healing power of nature and gardens for patients suffering from neurological diseases. Editors Lindsay Campbell and Anne Wiesen's introduction expands the scope and asks the question, "How do we proceed to expand our definition of health to include the health of the land and further, to invest in the health of our landscapes as part of our health care programs?" (p. 13). Filling out the definition of restorative commons, the editors define it as "publically accessible, nonexcludable, and managed through shared governance. We consider sites restorative if they contribute to the health and well-being of individuals, communities, and the landscape," (p. 11). The commons encompasses efforts to restore social and ecological function in a range of places, including parks, waterfronts, community gardens, housing and institutional settings, and memorials. In all the cases, it isn't about viewing space but participating in it; emphasis is on community-based, civic stewardship through site creation, management, education, and advocacy. The editors summarize the perspective of integrated human and environmental health by stating, "In essence, the urban ecosystem cannot function without citizen engagement." (p. 16).

The first 3 chapters set the theoretical context. Robert Martensen, Ph.D, provides a brief historical context for the synthesis of medicine and landscape design in the early parks movement of the 19th century. Environmental psychologist Judith Heerwagen focuses on evolutionary psychology, drawing on biophilia as manifested in today's landscape. The theory section concludes with an essay by social science researcher, Erika Svendsen, which emphasizes the active participation necessary in restorative environments, as illustrated through 2 research projects: an assessment of over 300 community garden groups affiliated with New York City's (NYC) GreenThumb and the STEW_MAP study of 2793 civic stewardships groups.

The short thought pieces set the stage for possibilities. Hillary Brown advocates linking people to natural processes through green infrastructure, while John Seitz inventories opportunities, from creating gardens on vacant land to reclaiming streets, walls, and waterways in urban environments. These pieces provide the bridge between research-based theory discussion and the case studies that follow.

Mostly cited in the northeastern U.S., the case studies include descriptions of community gardens, public housing projects, a prison garden, an ex-landfill turned park, and a waterfront. The case studies evoke place-making through accounts written by the key players and instigators who reflect on the challenges, opportunities, and evolution over time. For instance, the essay by Edie Stone hones in on the operations of NYC's GreenThumb based on her experience as director for over 10 yr. Stone describes her approach to maintaining over 500 community gardens throughout NYC. "Recognizing this independent spirit, I have deliberately taken a hands-off policy regarding the physical and organizational development of individual community gardens. As a civil servant I am committed to ensuring that the gardens, as public lands provide a public benefit. I am not, however, convinced that anyone other than the garden volunteers themselves can determine which benefit is most needed in their communities." (p. 127). Equally candid is the essay by James Jiler, former director of the GreenHouse Program at Rikers Island, NY, who describes the program's evolution, the hard work involved in sustaining the program, and the reality that with successes there are also failures.

The last section of interviews completed the storytelling through the words of "doers" in community open space. Interviews expedite transfer of ideas without the often burdensome request to write an article. Without these interviews, first-person accounts of inspired projects might go undocumented.

Restorative Commons effectively conveys the rich and layered meanings of restoration as action and outcome. It captures many themes within current community open space discourse: the need for multi-disciplinary scholarship, the significance of individual and networked non-profit organizations and institutions, and the extrapolation of a green network built on individual actions. Based on my own work with community garden organizations, I found myself nodding in appreciation of the candid descriptions of process and assessments of impact. Serendipitously, I was asked to write this review while I was preparing the syllabus for a freshman-level class on environmental design; several chapters found their way into course readings because they were brief, engaging, and colorful. By balancing research-based and expert-driven facts about human-nature interactions with the very real examples of activism to address serious needs within urban communities, *Restoring Commons* makes a strong case for green is good.

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Introduction to Restoration Ecology

Evelyn A. Howell, John A. Harrington, and Stephen B. Glass. 2011. Washington, DC: Island Press. Hardcover. $90.00. ISBN-13: 978-1-59726-189-0. 436 pages.

Finally! Since restoration burst on the academic scene starting around 20 yr ago, we have been waiting for a suitable textbook for undergraduate and graduate (especially masters-level) courses. Faculty have been cobbling together readings drawn from primary literature, methods manuals, ecosystem-specific books, more conceptual texts, and online guides, including the wonderful Society of Ecological Restoration (SER) primer. However, we lacked a single cohesive text that outlines the process of ecological restoration. *Restoration Ecology* ambitiously seeks to fill that void, based on years of experience from authors drawn from the ranks of teaching, research, and restoration practice. Together with *Ecological Restoration* by Susan Galatowitsch (not reviewed here), we now have solid standards against which future texts will be compared.

Such undertakings are not only ambitious, but also courageous. Restoration is both a rapidly evolving field, and one with as many different approaches as there are practitioners and teachers. A textbook sets itself up as a target for a barrage of alternative views and also runs the risk of becoming quickly dated. So I start with a caveat, I am only one of those voices, with my own idiosyncratic viewpoint.

Right off the bat, the authors take a stand with their book's title, rejecting the dichotomy between conceptual 'restoration ecology' and the practice of 'ecological restoration'. We will see if this sticks (I still like the dichotomy). They similarly do not shy from the difficulties of defining what restoration is, deftly combining both practical and more idealistic definitions. I appreciated their advice to the book's audience (restoration students) that "your goal will likely not be to duplicate the past—you cannot return an ecosystem to what it was a decade ago, let alone hundreds of years ago—but rather to create for a sustainable future."

The book itself is well organized and clearly written. The chapters parallel an organizational model for successful restoration introduced at the beginning, from assessment to planning to implementation to monitoring. There is due attention given to the human element in restoration. There are enlightening boxes and case studies throughout, and each chapter ends with a short Key Concepts summary and a useful discussion guide, Food for Thought. The text is crisp, the figures generally fine, and typographic errors rare (ironically, one of the very few I found was my own name in the References!). I did wish for more references, and more recent ones.

Chapter 2 attempts to summarize all of ecology in the context of restoration in a few pages, with some inevitable oversimplification that sometimes misinforms. Perhaps it would be better to sometimes just refer people to other sources, rather than try to summarize in more detail, especially for topics like statistics. Nonetheless, this chapter sets the conceptual foundation for what is to come.

The detail of methods presented as essential at each of these stages is exhaustive, and potentially exhausting to practitioners. I applaud to completeness of these descriptions, and they set a standard that we should seek to achieve, but I would have liked a clear caveat that real-world projects will often need to (and do) simplify from these detailed standards. For example, the reported case studies appear to often be much simpler in assessment (especially), planning, design, and implementation than is set out in these chapters. The difficult question is "How far can one deviate from the detailed ideal without risking restoration failure?"

In contrast (and yet related), one topic I wish had gotten greater attention is budgeting and costs. The most effective restoration techniques are often not the most cost-effective. In the authors' defense, restoration researchers have also lagged behind in addressing this issue, one that practitioners grapple with daily, often informally.

Perhaps appropriately, the book is strongly American, with most examples drawn from mesic and wetland systems in the U.S. One thing missing here and from almost all books on restoration is a description (and implications) of the remarkable resurgence of the eastern deciduous forest, largely without restoration help. As a western ecologist, I will also indulge a couple additional points: 1) The sentence, "(S)ome plant species . . . alter grasslands and grazing lands in California" hardly evokes the complete conversion of these systems by a multitude of annual invaders; and 2) treating fire as a 'management tool' misses the broader (and more difficult) goal of restoring historic fire regimes in a wide variety of ecosystems.

As I said at the beginning, it is easy to take potshots at such an ambitious endeavor. No text can fully satisfy the divergent viewpoints extant in restoration, or survive too long without revision in a rapidly evolving field. This book, however, does an admirable job and will deservingly find a place on most restoration bookshelves (or better yet, nightstands) and in many restoration classrooms. I heartily recommend it.

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