

[This book review first appeared in *Wildflower: North America's Magazine of Wild Flora*, autumn 1998]

THE ONCE AND FUTURE FOREST:  
A Guide to Forest Restoration Strategies

**Leslie Jones Sauer**  
**and Andropogon Associates**

Foreword by Ian McHarg  
Island Press, Washington, D.C., 1998. 381 pages  
with appendices, plant lists, scientific names,  
references, index. \$30.US.

**Book Review by David Orsini**

Those of us interested in preserving the Eastern Forest of North America often have to be resourceful in sustaining our hope and inspiration. We may have just journeyed through the local woodland to witness the regeneration of young oaks only to find that closer to home the City has planted another Norway Maple or that a neighbour has supported the peacetime use of chemicals and had their lawn sprayed. The threats to our natural environment seem both ubiquitous and never ending.

In reading **The Once and Future Forest** I became imbued with a sense of hope and optimism. The book is both an exploration of the Eastern Forest and its many disturbances and encroachments as well as a practical guide for its restoration. The book was written by Leslie Jones Sauer in conjunction with her colleagues at Andropogon Associates, Ltd., an Ecological Planning and Design firm in Philadelphia. Andropogon is widely known for its hands-on, community-based approach to ecological restoration. Therein lies what I believe to be the book's greatest strength, the information it contains is based on practical application and ongoing refinement. As practice does not occur in a mental void, theory and research are also discussed but it is always related back to application in the field. In addition to the work of Andropogon, the work of other researchers and restorationists are cited throughout the book. This sharing of information is critical to the future of restoration.

In seeking to make this work practical, the author has adopted a clear writing style, free of jargon, with the objective of making the book inviting and accessible to a wide audience. Terms common to the restoration process are used and defined within the sentence in which they are first introduced. The common names for plants and wildlife are used within the text with the scientific names outlined in the appendix. The book is also structured into three parts to disseminate the information in a clear and accessible format. Part I – *The Forest Today* provides a concise overview of the state of the Eastern Forest and the key issues which restoration must address such as fragmentation, succession and recruitment, invasive exotics, and atmospheric change, among others. I found the discussion of succession to be the best elucidations of the subject I have ever come across. Part II – *The Restoration Process* describes the different strategies for restoration. I found the restoration projects cited to be very instructive. The chapter on The North Woods of Central Park is an excellent outline of the community process, it

also outlines the many challenges inherent to the restoration of highly stressed urban woodlands. Part III – *Management Manuals* discusses the evolutionary nature of the restoration process, such as monitoring and ongoing refinements to management practices.

In writing a thoroughly comprehensible guide, Leslie Jones Sauer reflects her conviction that: “Restoration is everyone’s business, from the roadside maintenance crew to the local zoning board; the home gardener to the forester, the farmer, and all other members of the community” (p.91). The book contains valuable information on environmental education, consensus-building, and community monitoring. “The best way to convey real information to a community is to have them gather that information themselves, through monitoring both before and during restoration” (p.101).

The importance of being skilled observers of our landscape is emphasized, “...one of the most basic and interesting questions to ask about any landscape is *What is reproducing here?* In a very real way, this inquiry acts as a window into the future of the place and a key to sustaining or enhancing its bio-diversity” (p.27). The authors not only direct our attention to the forest floor but also beneath it. Disturbances to soil systems through atmospheric pollution, exotic soil biota, and compaction are examined. These impacts will affect future restoration efforts. The author recommends against bringing in imported soil amendments wherever possible and discusses the concept of “sustainable restoration”. All too often topsoil and peat moss is imported to one site at the expense of another. The common practice of stripping and stockpiling of topsoil kills valuable soil organisms within a few days of stockpiling. Soil is often treated as a building material rather than a living system. “Soil made in place is favoured over imported topsoil ...soil building inherent to the site should be used to the maximum extent possible”(p.158).

**The Once and Future Forest** contains many useful tips to address frequently encountered disturbances. One which I find particularly useful is “vertical staking” which can be used to remedy compacted soil. Soil compaction is a common problem in natural areas due to outlaw trails, maintenance vehicles, and the overuse of heavy machinery. In areas of compacted soil branches are driven down into the ground like wooden stakes every six or eight inches. “Installation requires minimal disturbance. The branches convey water and moisture into the root zone and loosen the surface as they decompose” (p.204). Vertical staking will also deter hikers and mountain bikers from these areas. A brilliant yet simple solution that addresses soil compaction while still maintaining soil horizons.

The book stresses the importance of restoration at a variety of scales. No site is too small for restoration though its potential as habitat may be limited. The importance of the residential garden is not overloaded, “...**even the garden, which expresses our most intimate relationship with nature and mirrors our attitudes towards the larger planet, can be a place that contributes towards sustaining and restoring indigenous communities. Indeed, some of the smallest habitats may be the most influential in changing our perspective on how we deal with all landscapes.**” (p.114-115). “It will take a great many fine and innovative gardeners to wean us away from lawn and provide attractive alternatives to current landscape conventions” (p.176). When we consider how much forest area has been displaced by turf grass the potential value of this contribution becomes apparent.

In addition to writing with passion. Leslie Jones Sauer writes with vision. For combatting the frightening implications of forest fragmentation, she recommends: "...primary intrusion into wild-lands, such as roads and other infrastructure, should be reevaluated and removed wherever possible. 'Roadlessness' has become one of the most important attributes of wilderness" (p.112). The vision is also revealed in the following passage. "Beneath our lawnmowers and asphalt is an invisible forest that represents the richest and most complex landscape type that can be attained given our climate. After centuries of beating back the forest, we now find ourselves sadly winning this age-old battle. It will take equal effort to bring the forest and all its richness back" (p.176).

The book contains a foreword written by Ian McHarg. In his passage Professor McHarg, one of the most important ecological planners of our time, highly recommends **The Once and Future Forest** and describes it as an "essential guide" for restoration. Restoration is not a precise science. Those of us involved in the preservation and restoration of the Eastern Forest can greatly benefit from this guide as we work to apply and refine it to our site specific situations. Though this work focuses on the restoration of the Eastern Forest, much of the information it contains is transferable and adaptable to other restoration efforts.

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