

Ecological Restoration

Volume 26, Number 4



December 2008

Guest Editorial	283
A Farewell to the Man, But Not His Science <i>Joy B. Zedler</i>	
SER Editorial	285
Adaptation in Transition <i>George Gann</i>	
Policy Report	287
Why You Should Pay Attention to Stream Mitigation Banking <i>Rebecca Lave, Morgan M. Robertson and Martin W. Doyle</i>	

RESTORATION NOTES

An Integrated Approach to Mapping Forest Conditions in the Southern Appalachians (North Carolina) <i>Weimin Xi, Lei Wang, Andrew G. Birt, Maria D. Tchakerian, Robert N. Coulson and Kier D. Klepzig</i>	290
Mine Land Reclamation Strategies for the Restoration of American Chestnut <i>Brian C. McCarthy, Jenise M. Bauman and Carolyn H. Keiffer</i>	292
Environmental Restoration in a Tropical Rainforest in Mexico <i>Paula Meli and Valentina Carrasco-Carballido</i>	294
Hurricane Effects on the Piedmont Forests: Patterns and Implications <i>Weimin Xi and Robert K. Peet</i>	295
Native Forbs Occurring in Brome Fields within a Mixed-Grass Prairie Landscape (North Dakota) <i>Nickolas A. Dufek and Robert K. Murphy</i>	298
Tropical Forest Restoration Research Opportunities in Southern Costa Rica <i>Rakan A. Zahawi and Karen Holl</i>	299
Supplemental Irrigation and Fertilization of Transplanted Michaux's Sumac May Not Be a Restoration Panacea (North Carolina) <i>Richard R. Braham and Layna E. Thrush</i>	300

ARTICLES

Forest Restoration in Campgrounds at Kings Canyon National Park, California <i>Susan B. Infalt and Truman P. Young</i>	302
Assessing the Reintroduction Potential of the Endangered Huachuca Water Umbel in Southeastern Arizona <i>Jonathan H. Titus and Priscilla J. Titus</i>	311
Native Species Replace Introduced Grass Cultivars Seeded following Wildfire <i>Cindy Talbott Roché, Roger L. Sheley and Robert C. Korfhage</i>	321
Ten Years of Ecological Restoration on a Texas Hill Country Site <i>David Davidson and Patricia Davidson</i>	331
Multi-species Planting and Other Practices to Restore Forest Diversity in Northeastern Minnesota <i>Robin S. Vora, Steven Lerol and Nicholas P. Danz</i>	340

The Dechannelization of Nippersink Creek: Learning about Native Illinois Streams through Restoration <i>Thomas B. Simpson</i>	350
Release of Roadside Native Perennial Grasses following Removal of Yellow Starthistle <i>Stephen L. Young and Victor P. Claassen</i>	357

ABSTRACTS

Grasslands	365	Traditional & Local Knowledge	370
Woodlands	365	Climate Change	370
Wetlands	366	Management & Monitoring	371
Lakes, Rivers & Streams	367	Reclamation & Rehabilitation	372
Coastal & Marine Communities	367	Endangered Species	372
Propagation & Introduction	368	Planning & Policy	373
Control of Pest Species	369	Issues & Perspectives	374
Tools & Technology	370		

BOOK REVIEWS

Nature's New Deal: The Civilian Conservation Corps and the Roots of the American Environmental Movement <i>Neil M. Maher, reviewed by Jeanne Nienaber Clarke</i>	374
Old Fields: Dynamics and Restoration of Abandoned Farmland <i>Viki A. Cramer and Richard J. Hobbs, reviewed by Randall D. Jackson</i>	376
Designing Sustainable Forest Landscapes <i>Simon Bell and Dean Apostol, reviewed by Dwight Barry</i>	377
Kitchen Literacy <i>Ann Vileisis, reviewed by Joy B. Zedler</i>	379

RECENTLY RECEIVED TITLES 380

MEETINGS 382



Paula Meli in Montes Azules Biosphere Reserve, México holds the seed pod of pica pica (*Mucuna* sp.), a liana native to the Lacandonan Rainforest. To learn more, turn to page 294. Photo by Valentina Carrasco-Carballido

ADVISORY BOARD

James Aronson

Centre for Functional and Evolutionary Ecology, France, and Missouri Botanical Garden, USA.

Peter Bowler

Department of Ecology and Evolutionary Biology
University of California-Irvine

Tom Chase

The Nature Conservancy
Martha's Vineyard, MA

Francisco Comín

Instituto Pirenaico de Ecología-CSIC
Zaragoza, Spain

Paul H. Gobster

USDA Forest Service
Chicago, IL

Andrew Light

Director, Center for Global Ethics
Department of Philosophy
George Mason University

Marty Melchior

Inter-Fluve, Inc.
Madison, WI

Darrel Morrison

School of Environmental Design
University of Georgia, Athens, GA

Steve Packard

National Audubon of Chicago
Chicago Wilderness Program
Northbrook, IL

Leslie Sauer

Private consultant
Hunterdon County, NJ

Steve Whisenant

Society for Ecological Restoration
International Publications Committee
Tucson, AZ

Ecological Restoration (ISSN 1522-4740, E-ISSN 1543-4079) is published quarterly by the University of Wisconsin Press, 1930 Monroe Street, 3rd Floor, Madison, WI 53711-2059. Periodicals postage paid at Madison, WI and at additional mailing offices.

Subscriptions: \$59 individuals—print and electronic (please pre-pay); \$135 business and nongovernmental organizations; \$232 libraries and government agencies. Electronic only: \$211. Non-U.S. subscribers please add \$14 for surface mail or \$35 for airmail. All correspondence regarding subscriptions, advertising, and related matters should be sent to: Journals Division, 1930 Monroe Street, 3rd Floor, Madison, WI 53711-2059, U.S.A.; www.wisc.edu/wisconsinpress/journals. Members of the Society for Ecological Restoration International receive *Ecological Restoration* at a discounted rate. Please visit our Web site at www.wisc.edu/wisconsinpress/journals for more information.

POSTMASTER: Send address changes to *Ecological Restoration*, 1930 Monroe Street, 3rd Floor, Madison, WI 53711-2059.

Love flowers best in openness and freedom.

—Edward Abbey, *Desert Solitaire*

Editor: *Mrill Ingram*

Associate Editor: *Chris Reyes*

Abstract and Copy Editors: *Carol Steinhart, Autumn Sabo & Frank Court*


Science Advisors: *Joy Zedler & Paul Zedler*

Website: *Art Levy*

University of Wisconsin Arboretum Director: *Kevin McSweeney*

Chair, Society for Ecological Restoration International: *George Gann*

Ecological Restoration is published quarterly by the University of Wisconsin Press. © by the Board of Regents of the University of Wisconsin System. No part of this publication may be reproduced without the written consent of the Editor. Requests for permission to reprint an article or illustration should be made directly to Margaret Walsh, UW Press, 1930 Monroe Street, Madison, WI 53711, 608/263-1131, mawalsh1@wisc.edu.

 Printed on 30% recycled text paper.

Contributions are welcome. Authors should send their materials to editor Mrill Ingram via email (mingram@wisc.edu) or surface mail to Editor, *Ecological Restoration*, UW Arboretum, 1207 Seminole Hwy, Madison, WI 53711. Guidelines for contributors are printed on the following page.

Authorization to reproduce material from this journal, beyond one copy for personal use or that permitted by Sections 107 and 108 of U.S. Copyright Law, is granted for a fee. For fee schedule and payment information, contact: www.copyright.com; The Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, phone 978/750-8400, Fax 978/750-4470.

Ecological Restoration is indexed in Elsevier BIOBASE, AGRICOLA and in CSA's Ecology databases. The *Ecological Restoration* web site is: www.ecologicalrestoration.info.

Ecological Restoration is affiliated with the Society for Ecological Restoration International, 285 W. 18th St. #1, Tucson, AZ 85701, 520/622-5485, <http://ser.org>. Members of the Society for Ecological Restoration International receive *Ecological Restoration* at a discounted rate. Please visit the UW Press Web site at www.wisc.edu/wisconsinpress/journals for more information.

Advertising: Call 608/263-0534 for current rates. Advertisements or references to products by brandname or trademark do not imply an endorsement by the editors or publishers of this journal.

Front Cover photo: A collage of photos reflects efforts to restore 2.5 km of Nippersink Creek in Illinois to its original meandering course after the stream had been channelized in 1951: A backhoe closes the agricultural-era ditch channel on August 20, 2000, and McHenry County Conservation District staff and seasonal workers subsequently lay out erosion control matting along the newly recontoured banks. The aerial photo shows the newly re-meandered Nippersink Creek in 2001. Turn to page 350 to learn more. Photos courtesy of MCCC staff

Back Cover caption: Tiny white umbels arise on short stalks from the rhizomes of Huachuca water umbel (*Lilaeopsis schaffneriana* ssp. *recurva*) making them difficult to detect. Photo by Priscilla Titus

Submissions

We welcome submissions to *Ecological Restoration* from any part of the world that relate to the restoration of plants, animals, ecological communities, or landscapes. Manuscripts may consider ecological and cultural aspects of restoration, as well as political, economic, legal, philosophical, and regulatory issues, urban restoration, and other subjects related to the ongoing development of the endeavor. Relevant topics also include techniques and tools for planning, species introduction, undesired species control, and monitoring. Manuscripts dealing with plant or animal community composition or general ecology must explicitly address restoration practice and theory. Similarly, material dealing with reclamation or rehabilitation, or with economic goals—economic forestry, range management, water quality—must relate to ecological restoration.

Material may be submitted for the following categories (listed as they are encountered in the journal): **Letters** to the Editor; **Editorials**, **Policy Reports**; **Restoration Notes** (shorter items describing projects, collaborations, events, innovative technologies, preliminary or unusual findings, thought-provoking concepts, imaginative solutions, etc.); full-length **Manuscripts** (case studies, research reports, photo essays, experiments, etc.); and book, journal, web, or movie **Reviews**.

Authors of articles and reviews should send their material to Editor Mrill Ingram, mingram@wisc.edu. Manuscripts must be submitted with a cover letter stating that the material has not been previously published, has not been submitted elsewhere, and will not be until a final decision has been reached by the editor.

Authors of Restoration Notes should submit their manuscripts to Associate Editor Chris Reyes, cmreyes@wisc.edu.

Review and Editing Process

All efforts are made to find appropriate peer reviewers for research and practitioner-oriented manuscripts (typically a minimum of three anonymous reviewers). The process requires approximately four months. Authors are welcome to suggest appropriate reviewers. Restoration Notes are reviewed and edited in-house unless additional expertise is required to evaluate the submission. The editors reserve the right to edit for style and clarity.

Style

Contributors should use a straightforward style free of unnecessary technical terms and jargon. We prefer the active voice (for example, “We measured three trees” instead of “Three trees were measured”). We do not require the standard research publication format and encourage alternative formats, such as case studies with well-developed discussions of lessons for practitioners, or articles on a specific study, beginning with a brief overview and including a discussion of the practical applications for restoration. Extensive quantitative data or detailed statistical analyses can be included as online supplementary material.

Manuscript Specifications and Format

For additional format specifications please refer to: (www.ecologicalrestoration.info/instructionsForContributors.asp). We appreciate full-length manuscripts kept below 6,000 words, although we will accept longer pieces, and should include a 250-word abstract plus up to five alphabetized keywords. Author affiliation and contact information should be at the end of the article after the references. Restoration Notes are generally a maximum of 1,500 words and may include up to two accompanying graphics. Book reviews are typically less than 2,000 words. Manuscripts should be one-and-one-half spaced and with one-inch margins.

Avoid footnotes. We use metric measurements. Write out numbers ten and under, except when supplying measurements or in tables. Spell out each acronym the first time it is used: warm-season grasses (WSG). Scientific names for all species should be presented in italics and parentheses after the first usage of each common name in the text: Culver’s root (*Veronicastrum virginicum*). The Integrated Taxonomic Information System is our default nomenclatural authority, but authors may use regional taxonomic sources when cited appropriately. Statistical terms and other measures should conform to the Council of Biology Editors Style Manual. Please consult the Chicago Manual of Style (15th ed.) and the Merriam-Webster Dictionary (11th ed.).

Authors of Restoration Notes and book reviews should keep references to a few key citations. We use the author-date system for in-text citations: (Xi et al. 2008a, 2008b, Smart and Dick 1999, ISCO 2006). Please see example references on our web site, in the free online issue, and below:

Gosine, A. 2003. Myths of diversity. *Alternatives* 291:12–14.

Illinois State Climatologist Office (ISCO). 2006. ISWS climate data: Monthly data for station 113320 (Galesburg). www.sws.uiuc.edu/data/climatedb/choose.asp?stn=113320

Kilvington, M., J. Rosier, R. Wilkinson and C. Freeman. 1998. Urban restoration: Social opportunities and constraints. Paper presented to the Symposium on Restoring the Health and Wealth of Ecosystems, Christchurch, New Zealand, September 28–30.

Richburg, J.A., A.C. Dibble and W.A. Patterson III. 2002. Woody invasive species and their role in altering fire regimes of the northeast and mid-Atlantic states. Pages 104–111 in K.E.M. Galley and T.P. Wilson (eds), *Proceedings of the Invasive Species Workshop*. Miscellaneous Publication No. 11. Tallahassee FL: Tall Timbers Research Station.

Smart, R.M. and G.O. Dick. 1999. Propagation and establishment of aquatic plants: A handbook for ecosystem restoration projects. U.S. Army Corps of Engineers Technical Report A-99-4.

Tables, Photos, and Illustrations

Captions should be *useful and detailed and include photo credits*. Photographs can illustrate or augment an article. Figures will be black and white in the print version of *Ecological Restoration* (usually requiring higher contrast) and can be reproduced in color in the online version. We welcome submissions of eye-catching high-quality *color* photographs for the front and back covers of the journal. MS Word is the preferred format for tables. Figures must have a minimum resolution of 300 dpi for photos at print size, 400 dpi for images containing text, and 600 dpi for images containing fine details. Please refer to www.wisc.edu/wisconsinpress/journals/preparing_illustrations.html.