ENVIRONMENTAL PRACTICE

Journal of the National Association of Environmental Professionals

In This Issue: Arctic Contaminants and Country Foods





THE EVERGREEN STATE COLLEGE

OYEORD HAHVERSITY PRESS

ENVIRONMENTAL PRACTICE

Journal of the National Association of Environmental Professionals

Published by Oxford University Press

in cooperation with the Graduate Program in Environmental Studies, The Evergreen State College, Olympia, WA 98505

Editor-in-Chief

John H. Perkins, PhD The Evergreen State College

Managing Editor

Catherine A. French, PhD The Evergreen State College

Assistant Editor

Robin Shoal
The Evergreen State College

Editorial Office

SEM 3127

The Evergreen State College 2700 Evergreen Pkwy NW Olympia, WA 98505 (phone) 360-867-5955 (fax) 360-867-6553 (e-mail) frenchca@evergreen.edu

CONTRIBUTING EDITORS

Central Europe

Nicola Ostertag Saxony State Ministry for Science and Art

Chapter Reports

Bruce Hasbrouck HDR Engineering, Inc.

Committee and Working Group Reports

Gary F. Kelman Maryland Department of the Environment

Cover Illustrations Jean M. French

Educational Affairs and Issues Cynthia Fridgen, PhD Michigan State University **Environmental Communication** and Public Participation

Susan L. Senecah, PhD SUNY College of Environmental Science & Forestry

Environmental Health in the Andean Region

José Suárez Torres, MD, PhD Fundacion Cimas del Ecuador

Environmental History and Contemporary Affairs

John Opie, PhD New Jersey Institute of Technology

Environmental Security and Dispute Resolution

Craig B. Davis, PhD
The Ohio State University

Ethics

Thomas R. Cuba, PhD, CEP Delta Seven, Inc.

Former Soviet Union and Eastern Europe

Thomas B. Rainey, PhD
The Evergreen State College

Military Environmental Issues
John J. Fittipaldi, CEP

Army Environmental Policy Institute

Natural History

Russell Rogers Washington Department of Fish and Wildlife

NEPA

Charles H. Eccleston, CEP Fluor Hanford, Inc.

Politics

Susan F. Campbell

Solid Waste Management

Marc C. Bruner, PhD Solid Waste Authority of Palm

Beach County

South Asia

D. K. Banerjee, PhD Jawaharlal Nehru University

Tribal Governments and Minority

Cultures

Linda Moon Stumpff, DPA Alan Parker The Evergreen State College

Water Resources and Management

Helene K. Merkel Horne Engineering Services Inc.

ADVISORY BOARD

Michael S. Baram, Esq. Boston University School of Law

Robert V. Bartlett, PhD Purdue University

Susan Power Bratton, PhD Whitworth College

Donald A. Brown Pennsylvania Department of

Environmental Protection

John Cairns, Jr., PhD Virginia Polytechnic Institute and State University

Richard A. Carpenter

Robert H. Harris, PhD Environ Corporation

Carolyn T. Hunsaker, PhD USDA Forest Service James L. Jaffe, JD
The University of Findlay

Burton C. Kross, PhD, PE Management Resources Network

Charles Malone, PhD, CEP State of Nevada

Richard McLean, PhD PTRL Environmental Services

David W. Orr, PhD Oberlin College

Bruce Piasecki, PhD AHC Group

Edwin P. Pister Desert Fishes Council

Joseph C. Reinert, PhD US Environmental Protection Agency

David J. Schaeffer, PhD, CEP University of Illinois

Chris G. Whipple, PhD
Environ International Corporation

Environmental Practice is the successor to The Environmental Professional, which appeared from 1978–1995. Environmental Practice will endeavor to honor the fine traditions established by The Environmental Professional while simultaneously opening new avenues of discussion on environmental issues.

Please visit the journal's Web site at www.envpra.oupjournals.org. For more information about the NAEP, please visit www.naep.org.

For more information about Oxford University Press, please visit www.oup-usa.org.

CONTENTS

POINTS OF VI	EW	
J. H. Perkins	EDITORIAL: Energy, Again (and Again and Again and)	73
B. Hasbrouck	FROM THE PRESIDENT OF NAEP	75
T. R. Cuba	PERSPECTIVE: The Ethics of Conflicted Interests	<i>77</i>
E. Skärbäck	PERSPECTIVE: Environmental Impact Reporting in Sweden: The Case of the Öresund Link	78
D. Cellarius	PERSPECTIVE: A Precautionary Approach to the Regulation of Sewage Sludge	82
D. Bodansky	PERSPECTIVE: The Environmental Paradox of Nuclear Power	86
NEWS & INFO	RMATION	
J. Á. Brío & B. Junquera	The Environmental Industry in Asturias, Spain	89
R. Rogers	The Green Menace: The European Green Crab	93
R. Shoal	Environmental Justice Roundtable: A College/Community Interaction	96
T. M. Frendak & J. J. Fittipaldi	Development of Lower-Toxicity Ammunition by the US Army	98
	New NAEP Members	99
	New Certified Environmental Professional	100
	Conferences	100
	Books & Resources	101
FEATURES & R	EVIEWS	
S. Bocking	ENVIRONMENTAL REVIEW: Arctic Contaminants and Country Foods: Scientific and Indigenous Perspectives on Environmental Risks	103
D. Stitzhal & D. R. Holmes	COMMENTARY: Estimating Used Motor Oil Volumes Generated by Do-It-Yourself Oil Changers in Bellevue, Washington	113
S. Garcia & C. E. Colten	COMMENTARY: Delisting and Redeveloping Brownfields in Texas: A Question of Effectiveness	122
L. N. McCold	BOOK REVIEW: Judith Petts, ed., Handbook of Environmental Impact Assessment	128
C. S. Hamlin	BOOK REVIEW: Martin V. Melosi, The Sanitary City: Urban Infrastructure in America from Colonial Times to the Present	129

Environmental Practice
Journal of the National Association of Environmental Professionals

June 2001 VOLUME 3, NUMBER 2

Continued

CONTRIBUTORS 131

On the Cover: A small herd of Peary caribou (Rangifer tarandus pearyi) in the Expedition River Valley, Axel Heiberg Island, in Canada's High Arctic. Peary caribou are found almost entirely on the Arctic islands, and only rarely on the mainland. They differ from the more abundant barren-ground caribou in being smaller and much paler in color. The High Arctic population of this species has been listed as endangered by the Committee on the Status of Endangered Wildlife in Canada. Wildlife in the Canadian Arctic, such as these caribou, carry in their tissues environmental contaminants produced in industrialized regions. This can result in human health concerns because consumption of Arctic wildlife is of nutritional, cultural, social, and economic importance to northern indigenous peoples. Evaluating and communicating health risks posed by contaminants in country foods present challenges that reflect the cultural gulf between northern communities, and scientists and health professionals. See Bocking, pp. 103–112, for a discussion of some of the issues surrounding consumption of Arctic wildlife by northern indigenous peoples. Photo by Miles Ecclestone, Trent University, used by permission.

Environmental Practice (ISSN 1466-0466) is a quarterly journal published by Oxford University Press, 2001 Evans Rd., Cary, NC 27513-2009 for the National Association of Environmental Professionals. The editorial office is at The Evergreen State College, Olympia, WA 98505.

Subscriptions: Subscription is included with membership in the National Association of Environmental Professionals. For membership information, see the form in the back of each issue. All other subscriptions include four issues and begin with the first issue of the current volume. The annual rates (Volume 3, 2001) are US\$100 (£70 in UK and Europe) for individuals; US\$135 (£93 in UK and Europe) for institutions. Single issues are available for US\$31 (£22 in UK and Europe) for individuals; US\$42 (£29 in UK and Europe) for institutions. All prices include postage. Individual rates apply only when issues of the journal are sent to a private address and payment is made by personal check or credit card. All requests for subscriptions, single issues or back issues, changes of address, and claims for missing issues should be sent to:

North America: Oxford University Press, Journals Customer Service, 2001 Evans Road, Cary, NC 27513-2009, USA. Toll-free in the USA and Canada 800-852-7323 or 919-677-0977. Fax: 919-677-1714. E-mail: jnlorders@oupusa.org.

Elsewhere: Oxford University Press, Journals Customer Service, Great Clarendon St., Oxford OX2 6DP, UK. Tel: +44 1865 267907. Fax: +44 1865 267485. E-mail: jnl.orders@oup.co.uk.

Advertising: Contact Annetta Hoggard, Oxford Journals Advertising, 2710 Peachtree St., Raleigh, NC 27608, USA. Tel: 919-571-0774. Fax: 919-881-7858. E-mail: ahoggard@bellsouth.net.

Requests for permissions, reprints, and photocopies: All rights reserved; no part of this publication may be reproduced, stored in a retrieval system,

or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without either prior written permission of the publisher (Oxford University Press, Journals Rights and Permissions, Great Clarendon St., Oxford OX2 6DP, UK; Tel: +44 1865 267561, fax: +44 1865 267485) or a license permitting restricted copying issued in the USA by the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. Fax: 978-750-4470 or in the UK by the Copyright Licensing Agency Ltd., 90 Tottenham Court Road, London W1P 9HE, UK. Reprints of individual articles are available only from the authors.

Copyright: It is a condition of publication in the journal that authors grant exclusive copyright license to the National Association of Environmental Professionals. Requests for permission to reprint material found in the journal should come to Oxford University Press. This ensures that requests from third parties to reproduce articles are handled efficiently and consistently and will also allow the article to be as widely disseminated as possible. Authors may use their own material in other publications provided that the journal is acknowledged as the original place of publication and Oxford University Press is notified in writing and in advance.

Abstracting/indexing: Environmental Practice is indexed in Environment Abstracts and Pollution Abstracts.

Environmental Practice is printed on acid-free paper that meets the minimum requirements of ANSI Standard Z39.48–1984 (Permanence of Paper). The paper is 100% recycled with 30% post-consumer waste.

Copyright © 2001 National Association of Environmental Professionals.

Postmaster: Send address changes to *Environmental Practice*, Journals Subscription Department, Oxford University Press, 2001 Evans Rd., Cary, NC 27513-2009, USA.

Mission Statement for Environmental Practice

Aims and Scope

Environmental Practice is the official journal and newsletter of the National Association of Environmental Professionals (NAEP). The central purpose of Environmental Practice is to provide an open forum to NAEP members and other concerned individuals for the discussion and analysis of significant environmental issues. Research Articles, Environmental Reviews, and Commentaries appearing in Environmental Practice are peer-reviewed and aim for the highest standards of professional quality.

Environmental Practice is a source for continuing professional renewal and development. It aims to serve men and women at all stages of their careers, from initial training through mid- and senior-levels. Environmental work is an exciting, dynamic field, and Environmental Practice strives to match that pace with lively and timely commentary on the critical issues of the day. Environmental Practice aims to provide authoritative discussion on issues of wide interest to the international community of environmental professionals.

Professionals from many different disciplinary backgrounds, working in many different arenas, are faced with developing imaginative approaches for the practical resolution of a wide variety of environmental problems. *Environmental Practice* provides a comprehensive outlet for the publication

of such interdisciplinary findings. This publication actively seeks breadth of viewpoint and method because it holds that solutions to environmental problems are often to be found in understanding the linkages among issues previously considered separate. Periodically, *Environmental Practice* will devote its pages to selected topics of special concern to a significant segment of the readership.

Priority for publication is given to articles that offer insightful views on the importance and interpretation of results from an interdisciplinary perspective. Reports of findings should go beyond a laboratory analysis, a field experiment, a philosophical discussion, or a theoretical modeling, for example, and discuss the implications of the findings for public policy or professional practice. Environmental Practice seeks especially to publish studies that link data and findings in science and technology with issues of public policy, health, environmental quality, law, political economy, management, and the appropriate standards for expertise. Many publications achieve excellence through tightly focused specialization, but in contrast Environmental Practice seeks its accomplishments through the promotion of excellent research and writing on the common interests among different kinds of specialists.

For the NAEP membership, Environmental Practice will carry NAEP news (national and chapter), and brief sketches of representative professional activities and issues. Whenever possible, Environmental Practice will seek to draw connections among current events, statements from leaders, pertinent research and scholarship, and NAEP concerns.

CALL FOR PAPERS

ENVIRONMENTAL PRACTICE

Special Issue on

Brownfields

Papers on a wide range of topics concerning brownfield restoration and redevelopment are solicited for a special issue of *Environmental Practice*, journal of the National Association of Environmental Professionals.

The US Environmental Protection Agency defines brownfields as "abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination." It is estimated that there are over half a million brownfield sites in the US.

Research Articles, Environmental Reviews, and Commentaries are invited on the following topics, or other topics pertinent to brownfields:

- Brownfields on tribal lands
- Community involvement
- Environmental justice issues
- Federal, state, and local government roles
- Financial aspects
- Future of brownfields in light of the current political climate
- International approaches
- Practitioners: (1) What kinds of professionals are involved? (2) What is the shape of the consulting industry on brownfields?
- Regulatory, policy, and legal issues
- Relationship of brownfields redevelopment to urban sprawl
- Technical (cleanup) issues related to redevelopment
- Toxicology/epidemiology aspects

Papers for peer-review due December 31, 2001

News Articles and Points of View due in mid-2002

Manuscripts should be formatted according to journal style – see the Information for Contributors elsewhere in this issue, or go to: envpra.oupjournals.org.

Submit manuscripts to:

Editorial Office, Environmental Practice
The Evergreen State College; SEM 3127
2700 Evergreen Parkway NW
Olympia, WA 98505 USA

(phone) 360-867-5955; (fax) 360-867-6553; (e-mail) journal@naep.org