

ECOLOGICAL ECONOMICS

The Transdisciplinary Journal of the International
Society for Ecological Economics

Volume 85 (2013)



ELSEVIER

Amsterdam • Boston • London • New York • Oxford • Paris •
Philadelphia • San Diego • St. Louis

© 2013 Elsevier B.V. All rights reserved.

This journal and the individual contributions contained in it are protected under copyright by Elsevier B.V., and the following terms and conditions apply to their use:

Photocopying

Single photocopies of single articles may be made for personal use as allowed by national copyright laws. Permission of the Publisher and payment of a fee is required for all other photocopying, including multiple or systematic copying, copying for advertising or promotional purposes, resale, and all forms of document delivery. Special rates are available for educational institutions that wish to make photocopies for non-profit educational classroom use.

For information on how to seek permission visit www.elsevier.com/permissions or call: (+44) 1865 843830 (UK) / (+1) 215 239 3804 (USA).

Derivative Works

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution. Permission of the Publisher is required for all other derivative works, including compilations and translations (please consult www.elsevier.com/permissions).

Electronic Storage or Usage

Permission of the Publisher is required to store or use electronically any material contained in this journal, including any article or part of an article (please consult www.elsevier.com/permissions).

Except as outlined above, 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 prior written permission of the Publisher.

Notice

No responsibility is assumed by the Publisher for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Because of rapid advances in the medical sciences, in particular, independent verification of diagnoses and drug dosages should be made.

Although all advertising material is expected to conform to ethical (medical) standards, inclusion in this publication does not constitute a guarantee or endorsement of the quality or value of such product or of the claims made of it by its manufacturer.

⊙ The paper used in this publication meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).



Contents

Survey

- Impacts of natural resource management technologies on agricultural yield and household income: The system of rice intensification in Timor Leste
 M. Noltze, S. Schwarze and M. Qaim (Germany) 59

Analysis

- Limits to Growth*, environmental science and the nature of modern prophecy
 R. Kool (Canada) 1
- Command-and-control revisited: Environmental compliance and technological change in Swedish industry 1970–1990
 A.-K. Bergquist, K. Söderholm, H. Kinneryd, M. Lindmark and P. Söderholm (Sweden) 6
- Revocability and reversibility in societal decision-making
 A. Verbruggen (Belgium) 20
- Environment, justice and the capability approach
 J. Ballet, J.-M. Koffi and J. Pelenc (France) 28
- Evaluating the USFS State and Private Forestry Redesign: A first look at policy implications
 M. Cox, S. Mincey, T. Ruseva, S. Villamayor-Tomas and B. Fischer (United States) 35
- The welfare impacts of an invasive species: Endogenous vs. exogenous price models
 S.M. McDermott, D.C. Finnoff and J.F. Shogren (United States) 43
- Assessment of ozone impacts on farming systems: A bio-economic modeling approach applied to the widely diverse French case
 P. Humblot, D. Leconte-Demarsy, P. Clerino, S. Szopa, J.-F. Castell and P.-A. Jayet (France) 50
- Ecological macroeconomics: An application to climate change
 A. Rezai, L. Taylor and R. Mechler (Austria, USA, Germany) 69
- Combining performance-based and action-based payments to provide environmental goods under uncertainty
 S. Derissen and M.F. Quaas (Germany) 77
- Economic dynamics and forest clearing: A spatial econometric analysis for Indonesia
 D. Wheeler, D. Hammer, R. Kraft, S. Dasgupta and B. Blankespoor (United States) 85

Methodological and Ideological Options

- Agri-environmental policies for biodiversity when the spatial pattern of the reserve matters
 L. Bamière, M. David and B. Vermont (France) 97
- The fiscal implications of hurricane strikes in the Caribbean
 B. Ouattara and E. Strobl (United Kingdom, France) 105
- The valuation of landfill disamenities in Birmingham
 Y.-J. Ham, D.J. Maddison and R.J.R. Elliott (United Kingdom) 116
- Policy dilemma of innovation: An info-gap approach
 Y. Ben-Haim, C.D. Osteen and L.J. Moffitt (Israel, United States) 130
- Living in denial: Climate change, emotions, and everyday life
 A.Y. Lo (Australia) 139
- Review of "The New Holy Wars: Economic Religion Versus Environmental Religion in Contemporary America" by Robert Nelson
 N.F. Angeli (USA) 140
- Critical Review of 5 Easy Pieces: The Impact of Fisheries on Marine Ecosystems
 M. Weber (United States) 140
- Review of "The Value of Nothing: How to Reshape Market Society and Redefine Democracy"
 M. Sileo 141

A changing climate in economics: Responses to crisis	
G. Chichilnisky and K.A. Sheeran (United States)	143
Ethics and the economist: What climate change demands of us	
J.A. Nelson (United States)	145
Pushing the boundaries of climate economics: critical issues to consider in climate policy analysis	
S.Ş. Scriciu, T. Barker and F. Ackerman (UK, United States)	155
CRED: A new model of climate and development	
F. Ackerman, E.A. Stanton and R. Bueno (USA)	166
Game theory and climate diplomacy	
S.J. DeCanio and A. Fremstad (USA)	177
Distributional biases in the analysis of climate change	
P. Skott and L. Davis (United States)	188
Valuing life: Experimental evidence using sensitivity to rare events	
O. Chanel and G. Chichilnisky (France, USA)	198