

I have been deluding myself that being a female scientist was getting easier. Truth be told, I've been too busy being the sole wage earner, nurturing three daughters, sending them to college, cleaning house, varnishing doors and baseboards, fixing plumbing and electrical systems, making major purchases of houses, cars, and windows, running a scientific program, publishing, teaching..... It has been easier to just assume that the plight of the woman scientist had to have gotten better. And, yet here I am at 54, still running a marathon.

If you are a super woman and managed to be a mother, wife, and scientist, congratulations, read this book. You are in a minority. The rest of us need your help. If you are an ordinary woman and part of the time managed to be a mother, wife, and scientist, also read this book. Take heart there are many like you and they have suggestions on balancing time, energy, and protecting your self-esteem, but it is not an easy path. If you are an accomplished female scientist sans spouse, sans spawn, or sans both, the rest of us have made your path more rocky and we apologize, but we hope you will choose to use your analytical prowess to dramatically enable women to contribute to scientific endeavors.

Disappointingly, the statistics clearly show that women scientists remain a minority as university faculty and within the more prestigious and influential echelons of the scientific community. *Motherhood, the Elephant in the Laboratory* is a compilation of personal testimonies of the success and struggle of women scientists over several decades. It describes their desire to contribute to the growth and application of scientific knowledge despite being continually hampered by dual careers, gender bias, debt, biological clocks, and human needs for family and fulfillment. I don't have answers, but I do know that, if our society cannot improve the status quo of women scientists, we are wasting invaluable intellectual resources that differ strikingly from those of men. We are placing undo stress on women and by association their families.....yes that includes men. So, men, read this book. Be shocked by its honesty; then be glad that women are still trying and that together we still have a chance to create an environment that is more conducive for women to contribute intellectually as well as to nurture and preserve the species.

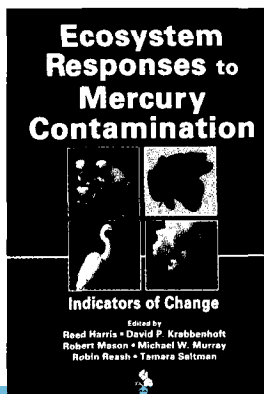
Ironically, penned on Independence Day, July 4th 2008.

2008. 219 pp. Hardcover. ISBN 978-0-8014-4664-1. \$25. Cornell University Press. Ithaca, NY

Susan Cormier  
Cincinnati, Ohio

**ECOSYSTEM RESPONSES TO MERCURY CONTAMINATION: INDICATORS OF CHANGE**

edited by Reed Harris, David P. Kabbenhoft, Robert Mason, Michael Murray, Robin Reash, and Tamara Saltman



This book presents the results of a workshop to "begin the process of designing a national mercury monitoring strategy." Its objectives are to identify a set of indicators to be monitored, provide guidance on monitoring strategies, and provide guidance on relating monitoring to emission controls. Indicators are described for air, deposition, water, sediments, aquatic biota, and wildlife. The choice of indicators is based on the author's reviews of prior mercury monitoring studies which are well and concisely summarized. My favorite aspect of this book relative to many other monitoring strategies is the emphasis on the use of monitoring not just to identify spatial and temporal trends, but also to identify and characterize causal relationships. Analysis of causation is needed to determine whether changes in biological exposures are due to emissions, to estimate the effects of proposed controls, and to determine whether management actions have been effective. The causal relationship between mercury emissions and environmental concentrations may seem straight forward, but changes in land use, hydrology, acidification, and other factors may confound the relationship, and variable time lags may obscure it. The strategy for determining causation presented in this volume is to test mechanistic models with monitoring data. The primary audience for this book is individuals involved in developing a national monitoring strategy for mercury, but it would also be of interest to those who are monitoring mercury locally or who are contemplating national monitoring programs for other chemicals.

2007. 216 pp. Hardcover. ISBN 0-8493-8892-9. \$140. CRC Press, Boca Raton, FL.

Glenn Suter  
SETAC Reviews Editor

**NUDGE: IMPROVING DECISIONS ABOUT HEALTH, WEALTH, AND HAPPINESS**

by Richard H. Thaler and Cass R. Sunstein

Richard H. Thaler  
Cass R. Sunstein



Improving Decisions  
About Health, Wealth,  
and Happiness

I had considered buying this book because of a general interest in behavioral economics, but I jumped to the Amazon web site when I learned that the authors are advisors to the Obama campaign. They are self-described paternalistic libertarians. That is, they believe in helping people to make good decisions but not forcing them. The help comes from changes in the structures of choice architectures that they call nudges. One example that has been adopted by Obama is changing the 401K savings plans so that people must opt out rather than opting in. That proposed policy is based on the finding that people are always more likely to choose the default, so it should be the choice that is best for most people.

The book is full of such psychological findings and examples of their potential applicability to public policy. Like other behavioral economists, the authors make much of the finding that people are not the rational and well informed utility maximizers that are assumed by standard economic models (including the cost-benefit and decision analytic models that are sometimes used in environmental decision making).

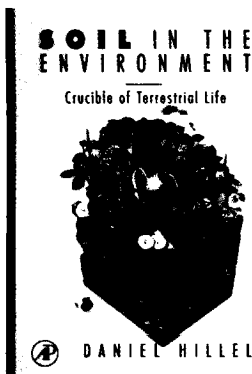
The chapter on the environment was a bit disappointing. Some of it is devoted to conventional economic incentives (e.g., taxes on pollution and cap and trade) as an alternative to command and control regulations. The examples of real nudges are providing information to consumers on energy use (they approve of the USEPA's Energy Star program) and shaming. Their example of the latter is the USEPA's Toxic Release Inventory, which reports releases of chemicals from industrial facilities. Although it is only a reporting requirement, it has resulted in reductions in emissions through the nudge of social shaming. I had hoped for more creativity from the authors, but that is left to us. It seems to me that the encouragement of good land use practices to improve water quality is an area that lends itself to nudges. Also, it will be important to determine which types of problems are best addressed by nudges, which by incentives and which by conventional regulations.

2008. 293 pp. Hardcover. ISBN 978-0-300-12223-7. \$26. Yale U. Press, New Haven, CT.

Glenn Suter  
SETAC Reviews Editor

### SOIL IN THE ENVIRONMENT: CRUCIBLE OF TERRESTRIAL LIFE

by Daniel Hillel



Daniel Hillel has a passion for soil that is contagious. It's easy to share his idealism and sense of urgency. In his preface in *Soil in the Environment: Crucible of Terrestrial Life*, Hillel states that "the future of our civilization depends critically on our ability to understand the nature and workings of the soil and to manage it judiciously so as to avoid its degradation and to maintain its functioning and biological productivity (Hillel ix)."

Hillel claims this book is for everyone, because everyone should be passionate about soil. It is very successful as a textbook; however, the content and structure flow nicely and have a good rhythm despite Hillel's exuberance with vocabulary and phraseology. The pictures and diagrams are helpful in facilitating the introduction to a whole new scientific vocabulary; otherwise, the reading and comprehension would be somewhat difficult for non-scientists. Despite Hillel's

remarks that everyone should study soil science, as a textbook, this would not be the best choice for any general education courses. However, for nearly any scientific major, it would be an ideal introduction to soil science. Also, while the book covers the essentials of soil science, it is not overly long and could be completed in an average semester course. Chapter topics range from soil-water dynamics to soil's chemical attributes to the biodiversity in soil.

Hillel's book also includes several chapters that focus on the history of soil and its social implications. The social aspects were especially intriguing and thought provoking and helped to show the relevance of the discipline. Other interesting parts of Hillel's book were the appendixes. The first focused on "the role of soil in the mitigation of global warming" and the second on "the role of soil in the global food supply". These were worth reading in their own right and were integrative with a planetary view similar to the Millennium Ecosystem Assessment Reports.

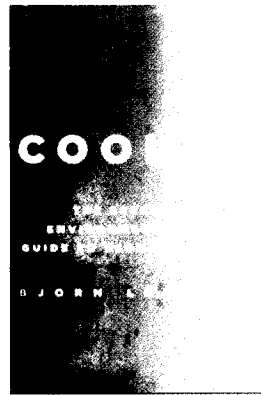
This is a good introductory text for environmental toxicologists or chemists who would like a good basis for communicating with soil scientists, who are beginning to consider interactions with soil processes, or who, at one point in their lives, enjoyed playing in the dirt.

2008. 307 pp. Hardcover. ISBN 978-0-12-348536-6. \$79.95. Academic Press. Elsevier, Burlington, MA

Claire K. Racine  
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### COOL IT: THE SKEPTICAL ENVIRONMENTALIST'S GUIDE TO GLOBAL WARMING

by Bjorn Lomborg



Oh boy. If you found Dr. Bjorn Lomborg's first book, *The Skeptical Environmentalist*, either maddeningly persuasive and convincing, disagreeable yet well documented, or maybe even a bit too controversial to concede to his views in public (perhaps all of the above?), then you are almost certain to find his assessment of the underlying public policy and science of global warming and society's response to the debate in *Cool It* equally vexing.

Global warming is undoubtedly one of — if not the — foremost environmental management issue on the public mind worldwide. Worldwide? Well, Lomborg would likely take immediate issue with that statement by pointing to the more tangible daily life and death struggles with hunger, HIV/AIDS, disease, and fresh water supply among the majority of the human population located in many parts of the world. The so-called developed countries have embraced global warming