

New Directions for Book Reviews in *Conservation Biology*

It is my pleasure to assume the responsibility of book review editor for *Conservation Biology*. After nearly a decade of hard work Peggy Fiedler has passed along the baton, and we all owe her a debt of gratitude.

I would like to introduce some changes to the section. First, we will move away from reviews of single books to reviews of sets of books. With this we ask that reviewers do more than simply review published works, we ask that they also provide their perspectives on the fields addressed by the books. Second, we seek representation of a wider range of books—complementing the publishing powerhouses of the United Kingdom and United States with books published in other countries. Although we will mainly review books published in English, we welcome suggestions for books published in other languages that should become known to English speakers. The wider range of books will include other disciplines as well. Conservation professionals trained in the natural sciences need to learn about books published in other disciplines, particularly the social sciences, from which conservation has much to learn. We will work with SCB's regional sections and working groups to expand our reach. We would also like to consider biographies, essay collections, and perhaps even novels and poetry—as long as the books meet the acid test of being important for the improvement of our conservation work. Furthermore, I am introducing a short section called “Noted with Interest” that provides thumbnail reviews of books of interest that will not receive full reviews. Finally, we would like to consider books published electronically that are available commercially or gratis.

I welcome your thoughts—and your patience—as we undertake these changes. Let us show the world that books remain a vital part of our science, our conservation, and our lives.

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Noted with Interest

Ingestion of Lead from Spent Ammunition: Implications for Wildlife and Humans. Watson, R. T., M. Fuller, M. Pokras, and W. G. Hunt, editors. 2009. The Peregrine Fund, Boise, ID. 394 pp. US\$25 (paperback). ISBN 978-0-961-98395-6.

More than 50 contributions from around the world document the ways ingestion of lead from spent ammunition creates problems for birds, mammals, and the humans that consume them.

Exploring Environmental History. Selected Essays. Smout, T. 2009. Edinburgh University Press, Edinburgh, United Kingdom. 208 pp. US\$95 (hardcover). ISBN 978-0-7486-3513-9.

An environmental historian examines how contemporary British nature conservation, especially of bogs and forests, has been shaped by 5 centuries of history.

The State of the Nation's Ecosystems. 2008. Measuring the Lands, Waters, and Living Resources of the United States. 2008. The H. John Heinz III Center for Science, Economics and the Environment and Island Press, Washington, D.C. 368 pp. US\$35 (paperback). ISBN 978-1-59726-471-6.

More than 100 experts and reviewers contributed to an elegant, accessible review of the status of U.S. ecosystems, answering for each one fundamental questions on their condition, whether things are getting better or worse, and who is doing what to help.

The Better to Eat You With. Fear in the Animal World. Berger, J. 2008. The University of Chicago Press, Chicago, IL. 360 pp. US\$29 (hardcover). ISBN 978-0-226-04363-0.

From his work on mammalian predator-prey systems on several continents, Berger makes the case for why fear and other behaviors need to be incorporated into conservation strategies.

Conservation and Politics

A New Conservation Politics: Power, Organization Building, and Effectiveness. Johns, D. 2009. Wiley-Blackwell, West Sussex, United Kingdom. 408 pp. US\$49.95 (paperback). ISBN 978-1-4051-9014-5.

A constituent once said to Franklin Delano Roosevelt, “Mr. President, why don't you do this and that?” To which

the President replied, "I want to madam, but you have to make me do it."

In his book, *A New Conservation Politics: Power, Organization Building, and Effectiveness*, David Johns tell us how to do just that—how to prompt elected officials and other decision makers to act favorably on behalf of wild, self-willed nature. Johns' book is timely and stands as a comprehensive primer for successfully advocating on behalf of wild things and wild places.

The book is well organized but dense. The author leaves no stone unturned as he offers instruction. Sometimes I lost rhythm of the book in its detail. Properly reading the book took time and attention.

I was entertained by his writing: "With enough resources symbols can be stripped of their moorings and put to use as doublespeak." Elsewhere, I was frustrated by his writing: "The ritual aspects of action and ritual per se—an invariant sequence of behaviors encoded with meaning the performance of which signifies acceptance of the meaning encoded—deserve more detailed review." Ouch.

The book's density arises from its wide intellectual drift as Johns draws examples from disparate sources to reinforce points. When writing of the pervasive and perverse effects of propaganda and the need for conservationists to toil even when the job seems endless, he reminds us that the "Vatican took 300 years to apologize for its persecution of Galileo."

Why read the book? Johns provides a good answer. "An old proverb provides useful direction to conservationists: good does not triumph over evil because it is good but because it is strong. That is the reason for this book."

My conclusion after reading the book: reading the book will make you a stronger conservationist. As the weight of our charge to protect nature grows heavy, as it becomes increasingly difficult to successfully fight for wild things and wild places and ensure the persistence of the security they provide us all, more strength will be needed.

Johns' book is an important reading if you believe a peaceful and prosperous future depends on the presence of healthy and robust ecosystems worldwide.

Johns' book is an important reading if you believe the behavior of contemporary societies is determined by politicians and political processes.

Johns' book is an important reading if you believe conservationists must redouble efforts on behalf of wild things and wild places.

Johns' book is an important reading if you believe day after day, month after month, year after year, conservationists must be better prepared than those bent on marginalizing or completely discounting the importance of self-willed nature.

Throughout the book Johns emphasizes the importance of the political forces confronted by conservationists and points out that those forces all too often "work

against the conservation movement as a whole." I mention this to highlight the book's principal shortcoming. Nowhere does Johns argue for conservationists to gain election to public office to work from the inside to turn those negatives forces into positive ones.

Given Johns' extensive work and research that frames his book, this shortcoming is puzzling. Clearly he knows the importance of politicians to nature, and yet in his book he does not advocate for conservationists to so serve (at local, county, state, or federal levels). This is unfortunate because elected officials are ideally positioned to work on behalf of wild things and wild places. I am so convinced of this that I challenge Johns' and everyone reading this review to put their name on a ballot and win elected office and then do so again and again and again.

The world is run by those who show up. It is time for those of us who believe in self-willed nature and are troubled by the extinction crisis to show up by earning a seat at the decision making table and then cajoling, arguing, lobbying, and ultimately voting on behalf of nature, again and again and again.

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Humans and Conservation

Conservation Psychology. Understanding and Promoting Human Care for Nature. Clayton, S., and G. Myers. 2009. Wiley-Blackwell, West Sussex, United Kingdom. 264 pp. US\$59.95 (paperback). ISBN 978-1-4051-7678-1.

Healing Spaces. The Science of Place and Well-Being. Sternberg, E. M. 2009. The Belknap Press of Harvard University Press, Cambridge, MA, and London, United Kingdom. 352 pp. US\$27.95 (hardcover). ISBN 978-0-674-03336-8.

We live in challenging times. Global warming is upon us. Ecosystems have been degraded to the point that many no longer contribute life-preserving functions. In a considerable number of places, biodiversity is in freefall. We are rapidly depleting our supply of oil and fresh water.

It is almost a cliché to note that each of these challenges stem from human behavior—from our efforts to meet our needs and desires. In our quest to satisfy ourselves, we have dramatically degraded the health of ecosystems and in doing so we have put our own health at risk.

While recognizing this reality, David Orr (Orr 2008) argued on these pages that we should turn to the discipline of human psychology for solutions. Psychology's mission, after all, is to understand human behavior and to promote human well-being. Yet, with some

notable exceptions (e.g., Oskamp 2000; Stern 2000), traditional psychology has done little to arm us against the sea of troubles we are facing with respect to the environment. Within psychology, however, an emerging subdiscipline—*environmental psychology*—offers both theory and evidence that can help guide us to a more sustainable, healthy future.

Environmental psychologists have achieved insights regarding the conditions under which individuals are likely to engage in proenvironment behavior. Some important findings demonstrate that vague, broad motivational messages have a little impact (De Young 1993) and that motivating people to engage in proenvironment behavior by providing strong external rewards does not lead to permanent changes in behavior. When the reward is withdrawn, the behavior diminishes (cf. Vining & Ebreo 2002). Recent work demonstrates that durable behavior change results when the motivations are multifaceted (De Young 2000; McKenzie-Mohr 2000) and relatively weak (Boyce & Geller 2001), the information presented is vivid and specific, and the context supports exploration, participation, and social exchange (Parnell & Larson 2005).

In *Conservation Psychology* Susan Clayton and Gene Myers have synthesized four decades of theory and research into a useful and engaging volume that sheds considerable light on our relationships with the natural world and our capacity to behave in ways that promote sustainability. Their goal has been to understand the interdependence between humans and nature and to examine insights from rigorous psychological research that can be used to lighten our impact on Earth.

The challenge of promoting more sustainable behavior is substantial. Clayton and Myers demonstrate that human behavior has multiple causes, “many of which are irrational and/or outside conscious awareness.” They show that people often do not know what is good for them, that even when they do know, they may not act on that knowledge, and that knowing the facts about why one should behave in a specific fashion is seldom enough to affect behavior.

They also show that human behavior is malleable—it is susceptible to change. The challenge thus becomes understanding the conditions under which humans are likely to act in a reasonable fashion and then finding ways to create those conditions in our daily lives. At the time that *Conservation Psychology* went to press, such a framework had not been published in the psychological literature, but one now exists and is well worth reading (Kaplan & Kaplan 2009).

Clayton and Myers’ book is organized in three sections, each of which people interested in conservation biology are likely to find stimulating and useful. The first concerns the theoretical foundations that underlie the relationship between environmental settings and people. In this section they address ways in which places have psychological significance for people. The second con-

cerns specific places in which individuals experience nature and the benefits that derive from these experiences. The final section examines practical ways to promote conservation. In this section they review findings related to behavioral interventions, community-based conservation programs, and environmental education. The book concludes with a hopeful argument that human behavior can be a profound source of solutions to the considerable environmental challenges we face.

Conservation Psychology includes a complete bibliography and a helpful glossary. It will serve as a useful textbook, introduction to the field, or inspiration for new research. I imagine many readers of *Conservation Biology* will appreciate it and Clayton and Myers for their care and craft in writing it.

In *Healing Spaces* Esther Sternberg describes the power of places—from walking along the ocean’s edge, to viewing an urban green space out your window—to promote health and healing. She also examines the salutary benefits of meditation, prayer, and exercise. Sternberg’s motivation in writing this book stems from a desire to stimulate the development or redesign of homes, hospitals, neighborhoods, and workplaces so that they promote health. It is a noble desire.

Healing Spaces is an outstanding example of the emerging trend in nonfiction literature to present ideas in a fashion that is as close to being a novel as possible. This approach seeks to communicate information through a story that unfolds, or in the case here, through many stories that unfold. In keeping with this trend, *Healing Spaces* does not have a preface or introduction that describes the argument the book will make or in which the theory that underlies the book’s orientation is described. It simply jumps immediately into the story.

At any point along the way, Sternberg’s skill as a writer comes through. It is effortless to read her and a pleasure to be taken along with her on journeys through neuroscience, architecture, and medicine. Reading such a book while on vacation, with a cup of something hot to drink, and a lot of time to allow the patterns to emerge could be an enjoyable experience.

But if you seek an overview of the relationships between environments and human well-being, with a clear description of the theories that motivate questions and explain results, this is not a book to put at the top of your list. For me, the lack of a conceptual framework was a source of frustration.

These books provide readers with an overview and considerable details of an emerging discipline within psychology that can help them address a range of issues related to sustainability. Readers will also see in these works invitations to collaborate with environmental psychologists to determine the conditions under which humans are likely to engage in behaviors that help sustain natural systems. Questions in several domains are pressing. To what extent might new knowledge in conservation

biology be employed by urban designers—and embraced by citizens—that will preserve productive ecosystems? How might biologists, psychologists, and the media team up to stimulate behavioral change intended to mitigate the impacts of climate change? To what extent might individuals engage in more proenvironment behavior if they learned to see the consequences—in the environment—of their typical patterns of behavior and consumption? What environmental cues would ecologists suggest might be most effective to explore? What environmental settings are likely to bring out the best in people? Addressing these and other questions will tap into the interconnectedness of humans and the environment and provide a rich source of potential solutions to the sea of troubles we face.

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Literature Cited

- Boyce, T. E., and E. S. Geller. 2001. Applied behavior analysis and occupational safety: the challenge of response maintenance. *Journal of Organizational Behavior Management* 21:3-11.
- De Young, R. 1993. Changing behavior and making it stick. The conceptualization and management of conservation behavior. *Environment and Behavior* 25:185-205.
- De Young, R. 2000. Expanding and evaluating motive for environmentally responsible behavior (ERB). *Journal of Social Issues* 56:509-526.
- Kaplan, S., and R. Kaplan. 2009. Creating a larger role for environmental psychology: The Reasonable Person Model as an integrative framework. *Journal of Environmental Psychology* 29:329-339.
- McKenzie-Mohr, D. 2000. Fostering sustainable behavior through community-based social marketing. *American Psychologist* 55:531-537.
- Orr, D. W. 2008. The psychology of survival. *Conservation Biology* 22:819-822.
- Oskamp, S. 2000. A sustainable future for humanity? How can psychology help? *American Psychologist* 55:496-508.
- Parnell, R., and O. P. Larson. 2005. Informing the development of domestic energy efficiency initiatives: An everyday household-centered framework. *Environment and Behavior* 37:787-807.
- Stern, P. C. 2000. Psychology, sustainability, and the science of human-environment interactions. *American Psychologist* 55:523-530.
- Vining, J., and A. Ebreo. 2002. Emerging theoretical and methodological perspectives on conservation behavior. Pages 541-558 in R. B. Bechtel and A. Churchman, editors. *Handbook of environmental psychology*. John Wiley and Sons, New York.

The Short Evolution of Climate-Change Literature

Field Notes from a Catastrophe: Man, Nature and Climate Change. Kolbert, E. 2007. Bloomsbury USA, New York, NY. 240 pp. US\$14.95 (paperback). ISBN 978-1-596-91130-7.

Early Spring. An Ecologist and Her Children Wake to a Warming World. Seidl, A. 2008. Beacon Press,

Boston, MA. 192 pp. US\$24.95 (paperback). ISBN 978-0-8070-8584-4.

The Rising Sea. Pikley, O. H., and R. Young. 2009. Shearwater Books, Washington, D.C. 224 pp. US\$25.96 (hardcover). ISBN 978-1-597-26191-3.

It is raining again—a heavy downpour of the sort that the northeastern United States is experiencing with greater frequency. The incidence of these monsoon-like rains—known as “extreme precipitation events,” in which several inches of rain fall in a short-time period—has increased significantly in the past 20 years. The extreme rains are a regular reminder of how global climate change is becoming part of our everyday lives. The native plants in my backyard near Long Island Sound love the increased rain, but more floods, shoreline hardening, degradation of water quality, and loss of species are among the predicted, less positive, implications of climate change for the sound and my community.

Over the past few years, I have read and recommended a number of books on climate change aimed at a general audience. The genre is indeed vast—more than 62,000 hits for “climate change” on amazon.com—with publications on everything from cooking with a low-carbon footprint to climate change and national security issues. Looking more closely at the newer book offerings, there is an increased emphasis on the personal and local, a more optimistic message about our ability to make changes to deal with global climate change, a predictable trend toward specialization, and a growing recognition that climate change is very much about people and human community adaptation and policy.

How to choose a few books to highlight these trends? I raised money for climate-change science programs of a major nongovernmental organization and helped create a project to build scenarios about what climate change will mean for Hudson Valley communities. As a result, I have made numerous presentations on climate-change trends and how human communities can respond, including book recommendations in the hope that people will want to read more. I usually include three diverse but informative publications: *Field Notes from a Catastrophe: Man, Nature and Climate Change* by Elizabeth Kolbert, *Early Spring* by Amy Seidl, and *The Rising Sea* by Orrin Pilkey and Rob Young.

An early, effective book in the climate-change literature, Kolbert's *Field Notes from a Catastrophe* covers a wide range of climate-change issues in a very readable, succinct 180 pages. It has been less than 5 years since its publication—originally as articles in *The New Yorker* in 2005 that were translated into a book the following year. *Field Notes from a Catastrophe* reflects its author's training in journalism—observant of details, precise, well organized, and articulate. It is a call to action, with a focus on the seriousness of global climate change that has few upbeat messages. The book provides a factual summary of overall trends and a clear description of

“stabilization wedges” or “steps that would be sufficient to prevent a billion metric tons of carbon per year from being emitted by 2054.” These descriptions are interspersed with vignettes about, for example, scientist Jim Hansen, who was thrust into the limelight during early climate-change debates, and a California research team working on the interplays between climate change and mosquito evolution. The book remains a great introduction to the mitigation issues posed by climate change. It is perhaps overly pessimistic, ending with the dire warning, “It may seem impossible to imagine that a technologically advanced society could choose, in essence, to destroy itself, but that is what we are now in the process of doing.”

A new genre of climate-change literature offers both a more personal and hopeful voice because it ties global climate change to personal responsibilities and actions. *Early Spring*, by an ecologist at the University of Vermont and Middlebury College, ties locally experienced changes on a Vermont farm to global climate-change issues. Amy Seidl is a warm, vivacious person who effectively describes the climate-change impacts on various habitats for wildlife through examples from her Vermont hollow. The title signals a personal and upbeat perspective—*Early Spring* evokes images of a mild climate and the end of a long Vermont winter. The title is a nod to Rachel Carson’s *Silent Spring*, and each chapter begins with a quotation from that grandmother of environmental crusaders. The book includes memorable stories: lilacs planted 40 years ago by the U.S. Agriculture Department for better timing of corn plantings demonstrate that blooming occurred an average of 3 days earlier in each decade since the 1960s. Seidl laments the probable loss of Vermont’s sugar maples, discusses changes in the timing of river runoff, and describes what is happening to songbirds, butterflies, and meadowland soils. She celebrates individual choices to reduce personal carbon footprints and the need for cultural change, long-term thinking, and adaptive infrastructure investment to prepare for a changing climate. The book ends with her daughter holding a doll and “imagining a world where she is caring for another being cradled in her arms, birches bending to the left and right outside the window.”

The Rising Sea by Orrin Pilkey and Rob Young is a good example of the trend toward specialization—focusing on one aspect of the climate-change puzzle or a single ecological system. The authors, pragmatists living and writing in the North Carolina Mountains far from the Atlantic coast, describe the impact of rising seas around the world, jumping from Pacific atolls, to the largely unfettered development in Florida, to the costs of moving

entire Alaskan communities to higher ground. They effectively describe the many factors influencing various projections of sea-level rise and end with a great summary outlining the actions needed and the hope that our coasts can be preserved. The book explicitly considers what humans might do to aggravate or minimize the impacts of sea-level rise. One minor quibble—I finished the book wishing for more detail on the linkages between sea-level rise and other climate-change factors such as ocean acidification, temperature changes, and ocean currents. All of these interconnections have major implications for migratory fish and other species. One of the things I like best about *The Rising Sea* is its inclusion of many examples of climate-change adaptation, which suggests an emerging emphasis on climate-change adaptation and linkages between the natural world and people. We are likely to see many more books about adaptation and human communities in the near future.

We also need books that present climate-change science in simple language, in stories and pictures, keeping the complexity, but highlighting a story line. Efforts underway to galvanize communities could benefit from a good book on climate-change communications or a book on best practices in adapting to climate change through local decisions about land-use regulations, floodplains, and coastal planning. Books on climate change in various ecosystems; the human-health impacts of climate change; the links between disaster planning and climate change; and the adaptation of infrastructure will further build on these concepts and provide tangible examples. Finally, books on the politics and policy issues at local, regional, national, and international levels will be increasingly important and an important subset of this emerging genre.

More than a century before anthropogenic global climate change, Mark Twain wrote, “Everyone talks about the weather, but nobody does anything about it.” The climate change literature—both current publications and likely future books—suggest we are figuring out how to do something about the weather, starting with personal choices and extending to community understanding of both the natural and human dimensions of the global climate challenge.

The rains have finally stopped. Now is the time to stop reading about climate change and to go outside to see how well my native garden managed the storm.

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