

Environments makes abundantly clear the potential solutions to the detailed problems discussed throughout the volume. For this reason, this book is highly recommended for students of inter-American ecological, conservation, and environmental issues. The volume is well balanced in that contributors from both sides of the border are well represented; thus, there are insights into the culpability for environmental degradation, as well as several suggestions as to how collaborative efforts will benefit the stakeholders of the region.

As may be expected in an edited volume, the writing, at times, is uneven, and some of the material across the chapters is repetitive. Also, while the volume is quite comprehensive in its coverage of the border region overall (particularly along the Mexico and California–Arizona borders), there is scant attention paid to the long border region along the Rio Grande–Rio Bravo below Big Bend National Park. It was disappointing, for example, to not see a discussion of the *colonias* in the south Texas–Tamaulipas area.

This is picking nits, however, at a book that does an excellent job with its intended purpose of exploring the “intimate connections of species, habits, and people in the immediate vicinity of an arbitrary political line” (p. 7). As Calderon-Aguilera and Flessa importantly note, “The science is clear; now, political action is needed” (p. 155). With this volume, and its several policy suggestions, there is little question as to what political action remains to be implemented.

Reference

Wildavsky, A. 1979. *Speaking Truth to Power: The Art and Craft of Policy Analysis*. Little, Brown, Boston, 446 pp.

Life in the Hothouse: How a Living Planet Survives Climate Change. Melanie Lenart. 2010. University of Arizona Press, Tucson. 236 pages. \$22.95 paperback (ISBN 978-0-8165-2723-6)
doi:10.1017/S1466046611000093

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This intelligent, well-written book makes a substantial contribution to the climate change debate. It may also have

unintended negative consequences within that debate. The book is scientifically grounded and presents strong pro-environmental arguments and yet it could well find favor with antiscientific climate change deniers.

Melanie Lenart’s core argument is that the Earth itself is a living entity and, as such, has an array of defenses that respond to global warming and act as countervailing natural forces. Lenart accepts the Gaia hypothesis (advanced by James Lovelock and others) and applies it to climate change. Defenses identified as serving to countervail global warming include the following: (1) rising levels of carbon dioxide, increased rainfall, and increased temperatures are all associated with climate change and all act to spur plant growth, which in turn sequesters carbon and, especially in the case of expanding and intensifying forests, acts to cool the climate; (2) expanded wetlands also sequester carbon and aid in mitigating damage from more frequent and intense storms; and (3) stronger storms convert more rock to soil and move more nutrients into watercourses and ultimately oceans, also aiding with sequestration and climate moderation in several ways.

In other words, there may be upper limits to warming or at least there are natural mechanisms to slow warming trends. Lenart presents her well-documented case clearly and in great detail. It would be difficult to refute the points that she makes. Her intent is in part to strengthen the case for protecting forests and wetlands. After presenting the case that hothouse climates have throughout geological and biological history triggered built-in defenses she asks, “What on Earth happens when a newcomer to the Gaian system interferes with the natural responses, honed over hundreds of millions of years, to a warming climate?” (p. 189). Humans, of course, are the newcomers.

“What happens,” she then asks, “if the planet has higher greenhouse-gas levels, higher temperature, and higher precipitations rates—yet with the unusual combination of lower biomass, lower water tables, and lower quantities of weathering products reaching the sea because of extensive development, logging, groundwater pumping, and river diversion?” (p. 190). Undoubtedly, strengthening these natural defenses will help, but unasked questions are whether these defenses are sufficient to the task we have already imposed through excessive emissions and what the limit is of such emissions, defenses notwithstanding.

Those who still deny that climate change is a problem, and they are legion in the political realm in North America, will rush to put forward an argument that the Earth can take

care of itself, so we need not necessarily reduce greenhouse gas emissions. Lenart is clear that she is not in that camp, far from it, but it might have been helpful if she had anticipated and rejected that viewpoint more explicitly. She also might have offered more discussion of possible

feedback loops that *intensify* global warming, as well as discussing those that counteract it.

Those caveats made, this volume adds a great deal to the discussion of climate change and should be widely read.