important symbol of pan-Indianism deserves greater explanation, as does the "sacred landscape" of peyote gardens in South Texas. These conceptual issues are lightly developed relative to the extensive description of the ritual use and effects of peyote. Eric Perramond presents an interesting study of the Tohono O'odham reservation straddling the U.S.-Mexico border. Its inhabitants have become entangled in drug trafficking (rather than production) and suffer from indiscriminate police actions by authorities on both sides. Kenneth Young laments that most scholarly work on tropical deforestation ignores drug crops despite the fact that their cultivation generates considerable changes in land cover. His assessment of coca/cocaine in Peru exemplifies a political ecology approach that he argues will address this deficit in the literature. Though his thoughtfully presented research agenda raises more questions than the chapter itself answers, it provides valuable direction for future research in this arena.

The penultimate chapter, by Mark Merlin and William Raynor, describes the cultivation and use of kava root in Oceania. They focus on its emergence as a cash crop and the considerable deforestation resulting from its growing exchange. Because kava faces no legal control (unique among the psychoactive substances covered here) this chapter seems conceptually (and geographically) isolated. Joseph Hobbs's summary argues that drug crops are a mixed blessing for indigenous populations. Although they provide modest incomes, the crops also invite unwanted attention from authorities committed to prohibition efforts. Because such efforts arouse resistance, they often define an antagonistic relationship between indigenous and majority cultures. What is missing from his otherwise fine conclusion, and from the volume as a whole, is a meaningful discussion of policy alternatives. Considering the importance of the issues raised here (and not just for indigenous peoples), it is insufficient to merely conclude that drug prohibition is a costly and imprudent mess. Hobbs briefly mentions crop substitution programs, subsidies, and eco-tourism, yet these are limited measures that fail to account for considerable opportunity costs faced by peasant farmers abandoning drug crops. Why is there no mention of legalization or any exploration of its potentially momentous effects? Wouldn't such a shift bear major implications for indigenous landscapes and the sustainable cultivation of drug crops?

This volume is readable, entertaining, and thought-provoking throughout, although its thirteen chapters are arranged in a haphazard fashion all too common in edited volumes. A more substantial criticism is that the chapters are typically descriptive accounts of processes that happen to take place in territories inhabited by indigenes. Efforts to synthesize or theorize common elements of the diverse indigenous landscapes presented here are scarce. Indeed, the essential themes covered repeatedly and most effectively in this collection are only indirectly related to indigenousness. In his introductory chapter, Kent Mathewson suggests that "indigenous moral geographies" provide a promising conceptual common ground for the kind of work found in this volume. That his proposal is halfheartedly developed in the introduction, and never mentioned again in the rest of the volume, hints at an unrealized potential that might have been achieved through more active revision and synthesis by the three co-editors. Nonetheless, the disparate work collected in this volume amounts to a productive first harvest in a fertile and innovative research area. It is an ambitious project demanding timely, difficult, and even dangerous fieldwork. The editors have issued their challenge; who among us will answer? Key Words: drug crops, indigenous landscapes, prohibition.

- Knock on Wood: Nature as Commodity in Douglas-Fir Country. W. Scott Prudham. London and New York: Routledge, 2005. ix and 260 pp., maps, diagrams, photos, notes, references, and index. \$31.95 paperback (ISBN 0-415-94402-3).
- Reviewed by David Correia, Department of Geography, University of Kentucky, Lexington, KY.

This book offers a critical and forceful analysis of the ecological degradation of extractive timber production in the Pacific Northwest. By focusing on the ecological dimension of economic restructuring in the forestry sector in the Pacific Northwest, Prudham provides an analytical framework for analyzing rural production processes in nature-based industries. He draws on a range of theoretical constructs to analyze the distinctiveness of economic development and environmental conflict in naturebased industries: the social construction of nature, labor process theory, ecological Marxism, and agrarian political economy. Yet, rather than an eclectic mix of theory building (or fence walking), he produces a brilliant synthesis on the production of capitalist nature. The result is an illustration of the explanatory capacity of a reworked agrarian political economy to explain how the trajectory of production processes and industry restructuring not only responds to the obstacle nature poses for capital accumulation, but actually transforms nature from obstacle to productive force.

The book is presented as an extended case study of the "various problems inherent in capitalist nature" (p. 9). Each of the six chapters seeks to evaluate the role of economic restructuring and the ramifications of the uses of nature and labor in capitalist development. In Chapter 1, Prudham attends to the material transformations occurring in commodity production in the forestry sector as a way to locate the origins of environmental conflict and the source of ecological change. He asks, "if we do not know how and why biophysical nature is being transformed, how can we hope to understand the various controversies surrounding these transformations?" (p. 7).

Chapters 2 and 3 draw on Karl Polanyi's critique of liberal capitalism. Specifically, Prudham explores the consequences of regulating nature and labor as mere commodities in productive processes. In Chapter 2, Prudham takes up the fiction of labor as a commodity and the consequences for such an arrangement to workers and worker health. Prudham identifies the propensity for timber firms to impose contract arrangements in production as a means to discipline workers, externalize the costs of unpredictable production, and overcome the place-based constraints of nature-based production. In this sense, contracts are "an instrument of power" (p. 29). In Chapter 3, Prudham explores the contradictions and consequences arising from changing nature into commodities, arguing that firm strategies and tactics "evolve in dynamic relation with biophysical nature" (p. 67). He argues persuasively here for a resolutely regional geographical analysis of the problems inherent to nature-based production.

In Chapter 4, Prudham develops the thesis that the very structure and organization of forestry emerges from the contradictions between social and ecological production.

Chapters 5 and 6 may be familiar to readers because both have appeared previously in print. Chapter 5 is a version of an article from the Annals of the Association of American Geographers (Prudham 2003). Here Prudham considers efforts to subordinate biophysical nature to the dictates of capital accumulation by improving tree stocks as a means to accommodate the shift from timber extraction to cultivation. Chapter 6, sharing the same title as his Antipode article (Prudham 1998), illustrates the social consequences of sustained yield in Oregon's Illinois Valley. Prudham points out here that the irony does not lie in the inability of sustained yield to actually sustain yield, but rather in the fact that the environmental opposition to sustained yield that emerged in Oregon paid little attention to the massive social costs of timber extraction.

In the epilogue, Prudham sums up his thinking on the linkages among economic restructuring, environmental conflict, and the re-regulated forestry sector that emerged from the spotted owl conflict of the 1990s by rhetorically asking, "[w]hat, if not capitalist social relations and commodity production, is responsible for the destruction of old-growth that New Forestry, in its Third Way manner, is meant to conserve and reproduce?" (p. 186). Nicely summed up here are Prudham's trenchant critiques of a reformist environmentalism that disregards rural livelihoods, state-directed science in service to capital that maintains a false neutrality, and the problems of a geographic analysis that lacks attention to the workings of capital accumulation.

I walk away from this excellent book with one specific criticism. In Chapter 2 Prudham draws on labor process theory to analyze the consequences of the commodification of human labor in the timber industry. Yet he admits his focus gives "short shrift to the agency of workers to contest relations of production" (p. 26). Workers, he explains, have been unsuccessful at opposing industrial restructuring strategies in timber production in the Pacific Northwest. I'm not sure I understand his logic here. Is resistance only important if "effective"? Of late, Polanyiesqe analyses in political ecology have fruitfully

focused on the contradictions and consequences emerging from capital treating nature as though it were a commodity produced in the metabolism of production. In this respect, Prudham's analysis is brilliant. With clarity and a keen analytical focus, he shows throughout how nature serves both as a barrier to capital accumulation and, when reconstituted through technological applications or genetic manipulation, as a force in the production process. Prudham's analysis, however, would have benefited by incorporating a more worker-centered labor geography in his analysis of the construction of a capitalist nature. Prudham chose instead to focus on firm and industry efforts to discipline labor. In this respect, the chapter is a success. He documents how contracts, piece wages, and other industry strategies to externalize the costs of production have contributed to an erosion in rural livelihoods.

Prudham combines a discursive analysis of the rhetoric of, and conflict over, sustained yield with an empirically-rich material analysis of the consequences of capitalist nature. I unhesitatingly recommend this book. In it you will find a powerful indictment against a form of economic development destructive to forest ecologies and rural communities. Likewise, the book offers a sophisticated critique regarding the form of regulation emerging in the wake of sustained yield. This book would be an excellent addition to any graduate seminar in economic geography, political ecology, or political economy. In addition, Prudham's analysis of the spotted owl crisis could serve well in an advanced undergraduate course on environmental politics or environmental conservation. You and your students will come away from the book with a clear understanding of the social and economic complexities of environmental conflict in the Pacific Northwest (no "owls versus jobs" reductionism here) and the social foundations of ecological change. Key Words: capitalist nature, environment, forestry, Pacific Northwest.

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- Himalayan Perceptions. Environmental Change and the Well Being of Mountain Peoples. Jack D. Ives. London and New York: Routledge, 2004. xxi and 221 pp., maps, diagrams., photos, notes, appendices, and index. \$120 cloth (ISBN 0-415-31798-3).
- Reviewed by John J. Metz, Department of History and Geography, Northern Kentucky University, Newport, KY.

In 1981 Jack Ives launched a new journal, *Mountain Research and Development*. Ives had in 1978 begun a project in the Himalayas exploring the links between upland land use and lowland sedimentation and flooding. This project sprang from the widespread belief that exploding numbers of mountain farmers were destabilizing the ecological and geological systems of the mountains. Donors initiated scores of projects to reestablish forests and halt erosion. *Mountain Research and Development* became a major outlet for scholars and practitioners exploring these processes.

But as Ives, his students, and as others began specifying exactly how this environmental crisis was unfolding, conflicting results began to emerge and accumulate. Ives and associates organized a conference in 1986 to review the various strands of research and seek a consensus. Most participants agreed that the supercrisis scenario was deceptively oversimple, if not totally wrong. In 1989 Ives and Bruno Messerli published *The Himalayan Dilemma*, which reviewed the issues and argued that the human contribution to flooding and sedimentation was far less substantial than the effects of climatological and geological processes.

The present book, *Himalayan Perceptions*, updates that earlier work, but expands its scope to include the "real problems" that threaten the stability of the region: poverty, oppression, unequal access to resources, bureaucratic mismanagement, corruption, misplaced priorities, and wars. It also suggests pathways toward sustainable development.

Ives considers these issues for the entire arc of high mountains stretching from the Pamirs, through the Hindu Kush-Himalaya, to Yunnan's Hengduan Mountains and the highlands of northern Thailand. He does a remarkable job of synthesizing a huge volume of information within the book's eleven chapters. The first two

<sup>— 2003.</sup> Taming trees: Capital, science, and nature in Pacific slope tree improvement. *Annals of the Association of American Geographers* 93:636–56.

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