

## Reviews

- Nicholas Dunning, pp. 37-51. University of Arizona Press, Tucson.
- Turner, B.L. II
- 1978a. Ancient Agricultural Land Use in the Central Maya Lowlands. In *Peter D. Harrison and B. L. Turner II*, edited by Peter D. Harrison and B. L. Turner II, pp. 163-184. University of New Mexico Press, Albuquerque.
- 1978b. The Development and Demise of the Swidden Thesis of Maya Agriculture. In *Pre-Hispanic Maya Agriculture*, edited by Peter D. Harrison and B. L. Turner II, pp. 13-22. University of New Mexico Press, Albuquerque.

***Children and Nature: Psychological, Sociocultural and Evolutionary Investigations.* Edited by Peter H. Kahn, Jr. and Stephen R. Kellert. xix + 348 pp. Cambridge, Massachusetts: The MIT Press. 2002. Includes name and subject indexes.**

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Though the backgrounds of the contributors to this edited volume are diverse, all of the authors strive to support one thesis – that there is value in children being allowed to play in the dirt. The authors defend this thesis with approaches ranging from the poetic-magical, drawing on the importance of the magic and the mythic in developing memories of nature that endure into adulthood (Chawla, Ch.8) to the rigorously scientific, looking at children’s contact with nature through direct, indirect, vicarious and symbolic means and inferring how this impacts children’s emotional, intellectual and values-related development (Kellert, Ch. 5). Most authors in this collection, however, seek a balance between qualitative and quantitative data in their explorations of children’s ecological experiences. Regardless of the field of the authors’ expertise, research on the topic of children’s interaction with nature seems somewhat limited. This volume attempts to collect what is known, and bring together a diverse group of thinkers to put together the pieces already available in the literature to support their inferences about the value of children developing a relationship with the natural world. A few of the authors do conduct research on the direct effects of interaction between children and the natural world, but these studies are more limited in scope and often focus upon the therapeutic functions of such interactions (Katcher, Ch. 7) or children’s experience of the natural world in a more constrained setting such as a zoo (Myers, Jr. and Saunders, Ch. 6).

The first two chapters of the volume have a particularly strong evolutionary component, as Verbeek and de Waal (Ch. 1) first examine the primate relationship with nature, introducing the key term biophilia, “an innate tendency to affiliate with natural things” (p. 1). Their contribution is followed up Heerwager and Orians (Ch. 2), who explore how children’s experience of the natural world could have shaped their survival in the past.

Several of the authors display a strong cognitive orientation, exploring the cognitive foundations of biological understanding (Coley, Solomon & Shafto, Ch. 3) and subsequently, the way interaction with the environment builds a structural framework of concepts and values in children (Kahn, Jr. Ch. 4). This last chapter may be of particular interest to anthropologists as it compares children’s construction of concepts and values through environmental interaction across cultures. Also of anthropological interest may be Katcher’s contribution (Ch. 7), as he draws on Victor Turner’s ideas of liminality and *communitas* to explain why children in residential treatment facilities for behavior problems behave differently in the presence of animals.

Two essays specifically address the adolescent and nature, with the first (Kaplan & Kaplan, Ch.9) exploring the thesis that adolescents may take a “time-out” from appreciating and enjoying nature. They ultimately support this thesis, citing adolescents’ penchant for social activity over solitary reflection, an activity more often associated with natural spaces. Thomashow (Ch. 10) supports the opposite contention, however, showing that adolescents do remain engaged with nature, particularly if their educational setting makes a hands-on project related to nature part of the curriculum.

For those interested in political ecology, the final chapters of this volume may be the most interesting. Orr's contribution (Ch. 11), entitled *Political economy and the ecology of childhood*, moves beyond lamenting that children are separated from nature and asks why this is the case. He addresses the main features of the world economy, focusing on how economic growth, material accumulation, development and commodification shape children's view of the world. Orr suggests that in today's world, children are isolated from nature, and deprived of a slower pace of life. Instead, children are exposed to virtual rather than actual reality, more violence, and a faster pace of life. His solution to this cycle of movement away from nature is to think about making the world a more child-centered place. He asks, "what would a child-centered political economy look like – how would we act if we were considering the welfare of unborn generations?" His contribution to the volume melds nicely with Pyle's reflections (Ch. 12) on "Eden in a vacant lot," calling for the maintenance of open spaces, and suggesting that butterflies may be an excellent index animal for judging when environments have become too "built-up."

This volume is a good starting point for anyone interested in children's interaction with the natural world. Because the authors are pulling together existing literature for the most part rather than reporting original research, the bibliographies following each essay typically provide a large number of useful references. The book as a whole is also valuable because it brings together authors of diverse academic backgrounds. These authors refrain from using jargon from their fields of specialization, instead focusing on the big picture and providing fresh perspectives to reader-researchers who seek to explore further the main point of the volume *Children and Nature*; that there are psychological, social, and possibly even survival benefits that accrue to children from being allowed to play in the dirt.

**Contents:**

- 1) Peter Verbeek & Frans B.M. de Waal. *The primate relationship with nature: biophilia as a general pattern*
- 2) Judith H. Heerwager & Gordon H. Orians. *The ecological world of children*
- 3) John D. Coley, Gregg E.A. Solomon, & Patrick Shafto. *The development of folkbiology: a cognitive science perspective on children's understanding of the biological world*
- 4) Peter H. Kahn, Jr. *Children's affiliations with nature: structure, development, and the problem of environmental generational amnesia*
- 5) Stephen R. Kellert. *Experiencing nature: affective, cognitive, and evaluative development in children*
- 6) Olin Eugene Myers, Jr. & Carol D. Saunders. *Animals as links toward developing caring relationships with the natural world*
- 7) Aaron Katcher. *Animals in therapeutic education: guides into the liminal state*
- 8) Louise Chawla. *Spots of time: manifold ways of being in nature in childhood*
- 9) Rachel Kaplan & Stephen Kaplan. *Adolescents and the natural environment: a time out?*
- 10) Cynthia Thomashow. *Adolescents and ecological identity: attending to wild nature*
- 11) David W. Orr. *Political economy and the ecology of childhood.*
- 12) Robert Michael Pyle. *Eden in a vacant lot: special places, species and kids in the neighborhood of life.*