BOOK REVIEWS

doi:10.1017/S0376892910000469

Environmental Crime. A Reader

EDITED BY ROB WHITE

xvii + 743 pp., $24.5 \times 17.5 \times 4$ cm, ISBN 978 1 84392 512 5 paperback, GB£, 32.99, Cullompton, UK: Willan Publishing, 2009

It is evident that we are rapidly surpassing ecological thresholds and the limits of natural systems. Recognition of this fact is reshaping the academy. Disciplines that have historically devoted scant attention to environmental problems are now beginning to examine these concerns in earnest, and in doing so, are changing how we study, describe and understand our shared ecological plight.

Environmental Crime by Rob White reflects this shift. In this reader, which consists of thirty-six previously published articles, White pushes the boundaries of criminology by providing a comprehensive philosophically-complex examination of environmental crime and green criminology, a subfield in the discipline that addresses issues tied to environmental harm and ecological justice. The articles he has assembled are drawn from an array of disciplines, making this work one of the most diverse discussions of green criminology to date.

White has organized the book into three sections: 'Conceptualizing environmental crime', 'Dynamics of environmental crime' and 'Environmental law enforcement.' While the large number of articles in this book makes it impossible to comment on each, all are consistently thought provoking and insightful: White has skilfully surveyed the subject's terrain.

The central objective of the first section of the book is to examine how various theoretical and philosophical debates shape the way we view and respond to environmental crime. To that end, it begins with a chapter on ecophilosophies by Halsey and White. In it they explore how anthropocentric, biocentric and ecocentric philosophies organize perceptions of environmental harm. To begin to effectively address environmental crime, as they argue, we must first acknowledge and then question the assumptions that underpin our belief systems about interrelations between people and nature. In a similar vein, Benton makes the case that we should move towards a non-anthropocentric ethic that would recognize the inherent value and rights of non-human species.

Several of the chapters in the first section address how societal power relations inform the definition, character and regulation of environmental crime. Friedrichs and Friedrichs, for instance, discuss how powerful global institutions like the World Bank have exploited both the environment and the poor within developing nations. Lynch and Stretesky, in turn, examine how corporate power has influenced perceptions of environmental harm and green criminology.

The second section of the book turns to an overview of various types of environmental crime, ranging from lobster poaching to the illegal dumping of hazardous e-waste. Although often overlooked in discussions of environmental harm, White takes aim at the USA federal government, one of the largest polluters in the world, by including several chapters that review its toxic legacy. Santana's chapter on the US navy's environmentally destructive bombing of Vieques (Puerto Rico), for example, skilfully reveals Washington's

complicity in environmental harm. Walter's chapter outlines how the USA has put pressure on African nations to accept genetically modified corn from USA farmers.

White should be credited for providing a useful review of many different forms of environmental crime. However, he does not include any of the recent articles that discuss the predicted impact of climate change on various forms of crime, such as violence, smuggling and trafficking. Since climate change is the most pressing environmental problem, this omission is noteworthy.

The absence of any substantive examination of gender issues in the second section of the book is another significant concern. Although several of the chapters discuss environmental justice, they tend to focus on inequalities tied to class and race. Scholars writing in critical geography, political ecology and poststructuralism have developed analyses that explore the relationship between gender and environmental justice, but green criminology has, in large part, marginalized questions of gender.

The final section of the book examines the prevention and enforcement of environmental crime. Although the chapters address different issues, one message resonates across each: environmental crimes have not been treated seriously by the criminal justice system. Brack, for example, discusses transnational crime and examines why security officials devote scant attention to the issue. White includes several chapters that explore ways to prevent environmental crime, such as through satellites to uncover illegal logging and market reduction approaches to diminish demands for illegal endangered animals. While perhaps beyond the scope of the section, a chapter on the precautionary principle may have been useful, given that it can foster conditions where we have less toxic material to criminally mishandle.

On balance, White succeeds admirably in providing an exceptionally thorough examination of the emerging field of green criminology. This work will no doubt provoke further interest in environmental crime, which warrants urgent attention. As White reminds us, 'the time to 'see, judge, act' is now.'

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doi:10.1017/S037689291100004X

Too Smart for Our Own Good: The Ecological Predicament of Humankind

BY CRAIG DILWORTH

xv + 530 pp., $24.5 \times 17 \times 2.5$ cm, ISBN 9780521757690 paperback, GB£ 19.99, Cambridge, UK: Cambridge University Press, 2010

In the 1950s, the distinguished limnologist G. Evelyn Hutchinson was invited to give a seminar at the Academy of Natural Sciences in Philadelphia, USA. I was asked to determine the compatibility of his slides with the Academy's projector. Slide 1 was two monkeys, one holding a lantern; slide 2 was a depiction of the onset of the menstrual cycle in Swedish women; slide 3 was a sketch of a Dodo. Other slides in the group were equally unrelated. I could not imagine

how these diverse slides might possibly be related. When Professor Hutchinson gave his lecture, I wondered how I could have missed the obvious connections between the slides. I had the same reaction when I flipped through and then read *Too Smart for Our Own Good: The Ecological Predicament of Humankind* by Craig Dilworth. The book is a most effective undertaking in demonstrating the tremendous value of consilience ([literally, 'a leaping together'] as used in E. O. Wilson's 1998 book *Consilience*), which discusses the reconnections between the disciplines that are occurring now and the new insights the connections provide).

Dilworth's book is an exceptionally 'good read' and is a synthesis of many important components (ecological, social, and technological) that are commonly treated in isolation from each other. Information is provided in a systematic and orderly way, and the flow from one idea to the next is almost seamless. The book also has a wealth of useful references. The unifying theme is the vicious circle principle (p. 110): 'Humankind's development consists in an accelerating movement from situations of scarcity, to technological innovation, to increased resource availability, to increased consumption, to population growth, to resource depletion, to scarcity once again, and so on.'

Although hunter-gatherers drove much of the megafauna of their era to extinction, they did manage to keep their populations within the region's carrying capacity. They knew the food resources available to them and used abortion, infanticide, sexual abstinence, war and male fear of too frequent contact with women to keep populations from outgrowing their resource. Due to the comparative abundance and great nutritional value of their food, they apparently had greater health and longevity than the agrarian culture that followed. Less social inequality existed then than in the 21st century. They had few possessions, more time per person for socialization, and exhibited a strong sense of territoriality and a detailed knowledge of a territory's boundaries.

Dilworth covers the patterns of today in Chapter 6 (p. 356): 'And so the vicious circle of the development of humankind churns on, and does so with ever greater momentum due to the constantly increasing consumption of fossil fuels and metals, with only the tiniest sign of resistance in the form of the efforts of environmental organizations and green political parties.' The situation is dire and public concern is inadequate. Any plan of societal redirection must be based on this information.

Chapter 7 (p. 393) also covers resistance to change: 'The fundamental problem as regards to the continuing existence of the human species is that, while we are 'smarter' than other species in our ability to develop technology, we, like them, follow the reaction, pioneering and overshoot principles when it comes to dealing with situations of sudden, continuous or great surplus. In keeping with this, and also like other animals, we are not karyotypically built so as to care about coming generations, other than those with which we have direct contact. . . . To react directly to our surroundings is how we instinctively react; it is built into our karyotype, just as it is built into the karyotypes of other species. And if it were at all possible to overcome this predilection, it would seem that we, as a species, would have to act on the basis of that very intelligence that has landed us in this situation in the first place. Overcoming our instincts with our intelligence would be a difficult task to say the least; however, as is evident from the fact that we haven't made the least effort to do so despite being well aware of the problem for many years.'

The book is well written and should be important to anyone interested in the future of civilization and *Homo sapiens*. Such breadth and depth in a single book are rare.

Reference

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doi:10.1017/S0376892911000051

Groundwater Economics

BY CHARLES A. JOB

xxv + 661 pp., $26 \times 18 \times 3.8$ cm, ISBN 978 1 4398 0900 6, US\$ 125.00, Boca Raton, FL, USA: CRC Press, Taylor Francis Group, 2010

Groundwater Economics is the latest addition to a growing number of books on diversified topics on groundwater resources and their management (for example Griebler et al. 2001; Quevauviller 2008). Charles A. Job's well researched and comprehensive book deals with different economic aspects of groundwater in detail that usually is not the common knowledge of the engineer, hydrologist, hydrogeologist, biologist, ecologist or the conservationist. Broad in scope, it is written for advanced undergraduates, graduate students and professional researchers. From the very beginning, it is assumed that economics through its skill to use a unique language of commensurability and calculation can be understood by readers varying from groundwater specialists to politicians. But economic arguments can also speed decisions in case of acceptance of vital projects dealing with groundwater systems under stress, with environmental management and/or environmental conservation themes.

The book is organized into five parts with 16 chapters, and part six includes several case studies to cover text topics. The book begins with a general overview of groundwater as both ecosystem and as a body of natural resource available for multiple usages. This sets the stage for the following chapters to introduce economic aspects with respect to resource consumption. The adoption of the idea that a groundwater body is an ecosystem networked to other terrestrial and aquatic systems, where humans are also members of those large ecological structures, interfering in many ways with the processes which act on the groundwater quality and/or quantity, is very attractive and increases the interest of the reader for the treatment of various topics in the next chapters.

The second part very effectively makes a case for understanding the importance of groundwater in the ecosystem as an essential commodity for much of the world's population. It provides a context for the necessary economic analysis. This part begins with a description of the hydrological cycle, followed by brief sections on groundwater in nature, availability, quality, flow, human activity and ecosystem vulnerability with emphasis on costs and benefits which are in turn closely connected with a number of constraints such as access to the resource, supply, demand and scarcity, water quality, waste disposal and legal considerations. Part three provides a short list of significant features from Part two and a summary of current data on indicators of competition for groundwater and subsurface environment. Part three describes the microeconomic and macroeconomic processes related to the use of