

# Ten books that lead to environmental literacy

Hopefully at least one thing found on many of our New Year's Resolutions lists this year had to do with learning something new. The "old-fashioned" way to learn something new is to read about it. Below I submit a short list of some of the best (and most important) books written in the area of environmental studies. I break the books into ten categories as a way to highlight key areas of focus within the field. For one book in each category, I briefly describe its aim, its structure and its conclusions. Beneath these cursory reviews, I also include a list of a few other books that represent important contributions within each category as well. If you read one of these books per month, by the end of 2004 you can consider yourself part of the environmentally educated public. What a deal! If you don't see titles that you have found particularly helpful in your own environmental education, please send your recommendations to *The Zephyr*, or me.

**Ecology** serves as the foundation for the environmental sciences as it examines the relationship between organisms (including humans) and the environment. *The Biodiversity Crisis: Losing What Counts* (2001; ed. M.J. Novacek, New Press) represents a recent collection of essays on biodiversity, a hot topic in the field of ecology. These short essays, which include many informative figures and splendid photographs, are written by several of the most well-respected voices in ecological studies. The book provides a very thoughtful overview of the current ecological crisis, one that gets must too little press despite its grand significance. It is also written to be very accessible as well as easily digestible.

*The Biodiversity Crisis* claims that the current mass extinction taking place on the Earth now, where as many as 1% of all species are removed from the tree of life each year, is due entirely to human influences. This contrasts greatly with prehistoric extinctions which are believed to be due to meteorite collisions or greatly enhanced volcanic activity. The primary causes for today's mass extinction include the destruction of the rainforests (promoted primarily by agribusiness' desire to expand zones of production for profit), introduction of exotic species (such as the Zebra mussel), and resource extraction especially on islands. The authors sense that these unsustainable behaviors are allowed because we don't appreciate what ecological systems provide for us (e.g., they clean the air and water, serve as sponges to reduce erosion and soil destruction, and consist of medicinal extracts). Until we properly value the ecological services that make life on Earth habitable for all its abundant forms, humans are destined to misuse and destroy species and ecosystems. Unfortunately once eliminated, species do not return.

Also, check out: E.P. Odum's *Ecology: A Bridge Between Science & Society* (1997;

Sinaeur); Aldo Leopold's *A Sand County Almanac* (1970; Ballantine); and, E.O. Wilson's *Biodiversity* (1990; National Academy).

**Economics** are often the deciding factor determining whether sufficient capital will be harnessed to remedy (or prevent) an environmental problem (such as, climate change, air pollution, etc.). No single book represents the full scope of environmental economics so it is impossible to recommend just one. However, here are a few to consider. If one is looking for an optimistic take on how markets—which are said to hold unbelievable sway today in the way businesses are run—can be made clean through the institution of innovative and presently available technologies, one can't miss *Natural Capitalism: Creating the Next Industrial Revolution* (1999; P. Hawken, A. Lovins, & L.H. Lovins, Little, Brown). On the other hand, if one is looking for a revolutionary alternative to neoclassical economics—which many environmentalists think may be a large part of the ecological problem—consider *For The Common Good* (1994; H.E. Daly & J.B. Cobb's *For the Common Good*, Beacon) which argues provocatively for a economics based on community interests rather than individual self-interests. If one prefers to read the fundamental treatise that helped spawn the field of ecological economics, examine E.F. Schumacher's *Small Is Beautiful: Economics As If People Mattered: 25 Years Later* (1999 [originally published in 1973]; Hartley & Marks) which represents a stimulating critique of dominant neo-classical paradigms. Presciently, Schumacher predicted more than thirty years ago that the future gains in economic productivity wouldn't be adequately distributed to the poor among us, despite many such claims made by the free marketers. In fact, in the past thirty years, while U.S. productivity rose over 50%, poverty levels are higher now than they were back in the early 70's (and people on the top continue to fight for tax cuts rather than redistribute their impressive gains over this period to those less fortunate). Additionally, if you want to get acquainted with a Nobel Prize winning economist who grew up in the developing world, Amartya Sen's *Development as Freedom* (2000; Knopf) will detail why enhancing human freedoms is more compelling than augmenting income or other forms of "development" as a means to improving opportunities and well-being for all humans. Wherever you start, keep a pen close at hand, because these works will motivate you to become a student once again.

For a more disciplinary focus, check out: T. Tietenberg's *Environment and Natural Resource Economics* (2002 (6th ed.), Pearson Addison Wesley); and, H. Daly & J. Farley's *Ecological Economics: Principles and Applications* (2003; Island).

**Ethics** provides humanity a means to determine what is "right" and "wrong" as well as the nature of our individual (or community) responsibilities and obligations to the Earth and its inhabitants. While there are an abundant number of textbooks on environmental ethics, *Ishmael: An Adventure of the Mind and Spirit* (1992; D. Quinn; Bantam/Turner) may be a good starting point for the uninitiated. *Ishmael* is a gorilla who walks a man through the history of humankind as seen through his non-human eyes. This unlikely teacher brings to light things that might be available to the penetrating thinker but almost completely inaccessible to modern humanity. The path that *Ishmael's* story takes reveals much that society should consider and discuss. However, *Ishmael* doesn't complete the story, rather it begins a visionary journey that continues with Quinn's other enjoyable

and challenging titles—*My Ishmael, The Story of B*, and *Beyond Civilization*.

WINNER OF THE TURNER TOMORROW FELLOWSHIP  
**ISHMAEL**  
*An Adventure of the Mind and Spirit*



"From now on I will divide the books I have read into two categories—the ones I read before *Ishmael* and those read after."  
—Jim Bretell, *Whole Earth Review*

A NOVEL BY  
**DANIEL QUINN**  
AUTHOR OF *PROCEDE*

*Ishmael* has one simple objective—to explain, "How things came to be this way?" That is, how did human civilization grow from its infancy to its modern state? It is a question that we all too often ignore or treat with indifference. Quinn's fictitious gorilla makes us realize how serious is this error of oversight and apathy. *Ishmael* tells his student (and, thereby, the readership) that we have become takers rather than leavers. And unfortunately, by the 20th Century, so few leavers remain that the thought of being a leaver (i.e., someone not dependant on the commodification of resources and labor) is so foreign to us that it is virtually inconceivable. *Ishmael* also teaches us that "there is more than one right way to live"; in particular, the way that involves continued depletion of resources and despoilment of ecosystems is completely wrong-headed especially if it is a course that billions of humans take. This is just a sampling of insights gleaned from a read of *Ishmael* but indications are that many have gained from its wisdom. This award-winning book is so popular and has brought to light so many connections for its readers that a growing community of its advocates started a spectacular website <[www.ishmael.com](http://www.ishmael.com)> and Hollywood even produced the highly-recommended movie, *Instinct*, based on the novel.

Also, check out: D. Vandevener & C. Pierce's *The Environmental Ethics and Policy Book: Philosophy, Ecology and Economics* (2002; Wadsworth); M. Sagoff's *The Economy of the Earth: Philosophy, Law, and the Environment* (1990; Cambridge University); and, Peter Wenz's *Environmental Ethics Today* (2001; Oxford).

**Water** is the dominant chemical in our bodies and therefore is the most important resource on the planet. *Blue Gold: The Fight to Stop The Corporate Theft of the World's Water* (2002; M. Barlow & T. Clarke; New Press) examines many questions related to water—its availability, its ownership, its use, and its future. Barlow and Clarke's book is broken into three sections. The first examines water as a limited resource and its associated environmental problems (including human health). The second outlines the effort by large multinational corporations to privatize the world's fresh water. The third offers a healthy list of measures and objectives that may turn the tide towards equity, sustainability and peaceful use and allocation of water.

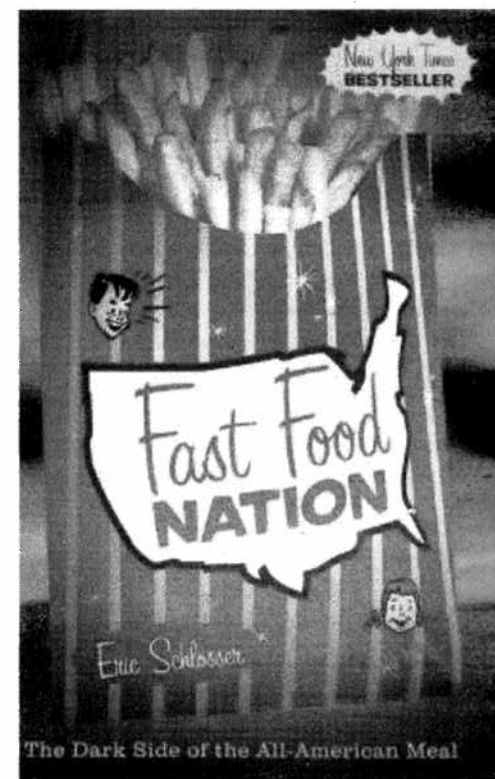
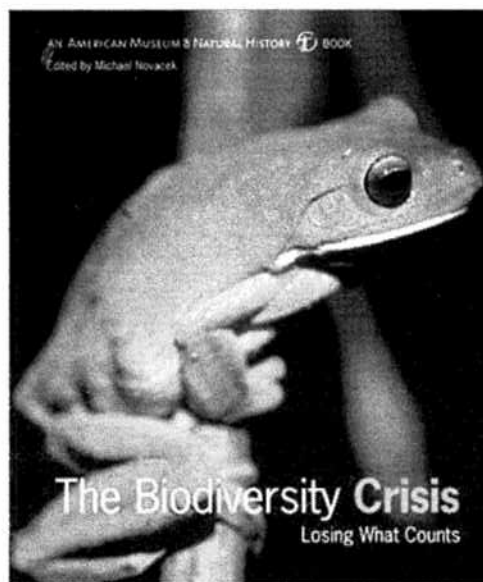
Barlow and Clarke don't hold back in telling us how serious the water problem has become. More than 25 million people a year die from water borne pathogens, almost all coming from developing countries. Can this

not be expected when 90% of wastewater in the "Third World" is still (in 2000) "discharged untreated into local rivers and streams" (p. 52)? Unfathomable to those in the U.S., more than one in six humans on the planet today has **no** access to clean water and almost "three billion have no access to sanitation services" (p. 24). Barlow and Clarke note that the UN claims that more than thirty countries currently are "facing water stress and scarcity" and these numbers will likely to expand greatly in the next 25 years due to overdraws, climate change, and pollution. And what is the solution to these inconceivable problems. Well, a growing number of powerful organizations and corporations, recognizing that fresh water is becoming scarcer by the minute, have begun a very elaborate campaign to privatize all of the world's fresh water resources. Barlow and Clarke argue how dangerous and short-sighted this solution is and, in response, they provide a host of more equitable solutions—including, guaranteeing water as a basic human "right," addressing global equity, and promoting international treaties that consider water part of the commons.

Also, check out: M. De Villiers' *Water: The Fate of Our Most Precious Resource* (2001; Mariner Books); M. Reisner's *Cadillac Desert: The American and Its Disappearing Water* (1987; Penguin); and, Vandana Shiva's *Water Wars: Privatization, Pollution, and Profit* (2002; South End).

**Agriculture** provides us with the energy and nutrients that we need to survive. *Fast Food Nation: the Dark Side of the All-American Meal* (2002; E. Schlosser; Perennial) takes a close look at the fast food industry as well as one of its key supporters, the meat industry. This modern exposé delineates what is in the food that many Americans eat, how it got there, and who suffers from these "advanced" forms of industrialism. This book brings elements of *The Jungle*, Upton Sinclair's 1906 classic piece of muckraking, back into the nation's consciousness of our nation. The material revealed by Schlosser demand our careful reexamination; otherwise many of us will continue to be unwitting victims to agribusiness' unsafe and questionable practices. Schlosser's sixty-four pages of annotated notes make *Fast Food Nation* an excellent resource to find paths for further study as well.

Schlosser's startling findings indicate that the current dominant form of agriculture is in great need of adjustment and reform. Fast food advertisers, who increasingly have access to our public schools, cajole children to frequent their establishments. Many schools who are suffering from governmental budget cuts find short-



term relief by allowing fast food companies into the schools themselves. According to Schlosser, the agricultural processes utilized by the fast food industry demand ungodly amounts of antibiotics, hormones and pesticides. The material content of the food is often so questionable that fast food companies use artificial chemical agents that give the food its "desired" color, texture, smell, and taste. Workers in meat-packing plants in the U.S. are disproportionately filled with transient illegal immigrants who are in no position to demand job security or health insurance despite working in one of the most dangerous jobs one can find. One guarantee, a reader of *Fast Food Nation* will encounter these and other revelations and, as a result, have their head spinning with disbelief when they are done.

Also, check out: Rachel Carson's *Silent Spring* (2002 [40th Anniversary Ed.]; Houghton Mifflin); G. Mclssac & W. Edwards' (eds.) *Sustainable Agriculture in the American Midwest* (1994; University of Illinois Press); and Sandra Steingraber's *Living Downstream: A Scientist's Personal Investigation of Cancer and the Environment* (1997, Perseus). **Energy** provides us warmth as well as the ability to travel, communicate, manufacture, and transport at an increasingly fast rate. *Resource Wars: The New Landscape of Global Conflict* (2001; M.T. Klare; Henry Holt) serves as a reminder that our current use of energy is directly associated with political upheaval and international turmoil. While *Resource Wars* is a book that covers four major resources of great importance—petroleum, water, minerals and timber—the bulk of the discussion centers on oil (one key product in the refinement of petroleum). Since oil has become so important in the world today, particularly as we continue to rely on motorized transportation and military forces, fuel themselves with this limited resource, Klare notes that, no resource is "more likely to provoke conflict between states in the twenty-first century than oil" (p. 27).

Klare's treatise focuses on historical and future conflicts over oil in three specific areas on the planet—the Persian Gulf, the Caspian Sea basin and the South China Sea. The Persian Gulf, where nearly two-thirds of all petroleum on the planet resides, has witnessed numerous wars in recent times and it likely to witness more as the value of this commodity increases with increased demand and reduced supply. Klare suggests that we, in the U.S., have a great deal at stake in this region because our country "will inevitably be drawn into any future conflict" (p. 80) because we have taken it upon ourselves to bring stability to the region. The Caspian Sea basin, which includes Iran, Russia, and several former Soviet republics, is also home to huge reserves of petroleum and natural gas. The fight over these resources will be fierce largely because the area is characterized by "contested boundaries and territorial disputes, the prevalence of authoritarian regimes, severe economic disparities, long-standing regional rivalries, and a cauldron of ethnic and religious strife" (p. 81). The South China Sea may have different parties involved but the tug-of-war over resources there is also likely to lead to conflagration as well. The picture painted by Klare isn't a pretty one but it is one that deserves a close inspection if we are going to make informed and sound decisions in international policy in the foreseeable future.

Also, check out: R. Heinberg's *The Party's Over: Oil, War and the Fate of Industrial Societies* (2003; New Society); and, H. Sheer's *The Solar Economy: Renewable Energy for a Sustainable Global Future* (2002; Earthscan).

**Climate Change** is considered by many scientists to be one of the most pressing global concerns looming on our horizon. *Global Warming: The Complete Briefing* (1997; J. Houghton; Cambridge) examines

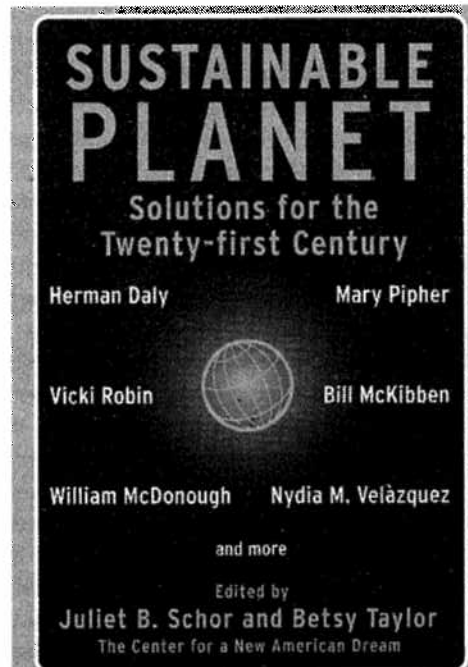
the prospects for future climate change. Sir John Houghton, who co-chaired the Scientific Assessment Working-Group of the Intergovernmental Panel on Climate Change (IPCC) (the largest and most prominent international body studying the subject), provides a comprehensive overview of this very complex subject. In twelve dense but accessible chapters, Houghton not only covers a wealth of pertinent scientific topics (e.g., the greenhouse effect, climate models, and the impacts of climate change) but also deals with two areas often neglected in similar accounts—namely, why we should be concerned and how should we deal with the plethora of uncertainties present.

Given the author's immediate connections with the IPCC, his conclusions can be considered to represent the current dominant scientific paradigm on climate change. And given many of the stark conclusions in the book, our society should be weary. Houghton notes that climate change is expected to have many serious impacts on the planet. Namely, fresh water supplies are going to go through a great deal of variability, something current availability and distribution in many places will likely not be able to tolerate. Human health will likely suffer as diseases (such as malaria and yellow fever) currently relegated to the tropics will find inviting breeding grounds in newly warm regions. Also, climate change is expected to result in substantial die-back and loss of production in forests, particularly in the mid to high latitudes, which will only exacerbate stresses on ecosystems and their many life forms.

Also, check out: R. Gelbspan's *The Heat is On: The Climate Crisis, The Cover-Up, The Prescription* (1998; Perseus); P.J. Michaels & R.C. Balling's *The Satanic Gases* (2001, Cato Institute); and, Jeremy Leggett's *The Carbon Wars: Global Warming and the End of the Oil Era* (2001; Taylor & Francis).

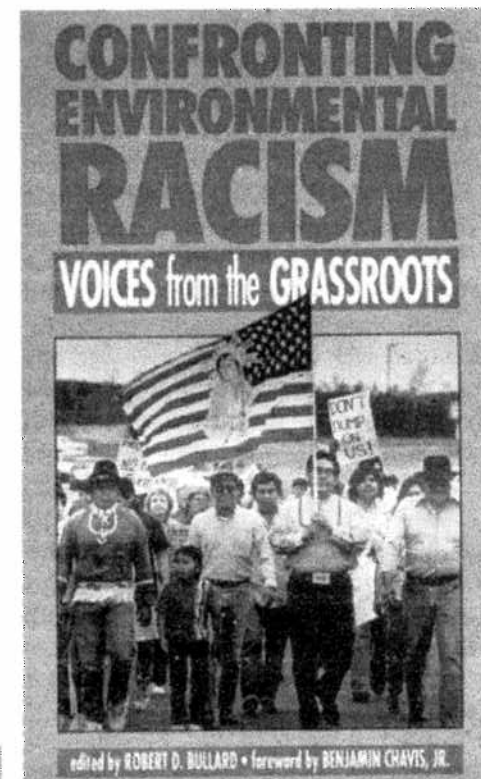
**Sustainability** represents a concept that may suggest a pathway to a better future. However, several critiques of environmental thinking claim that "sustainability" is inherently ambiguous or, worse, terribly idealistic. *Sustainable Planet: Solutions for the Twenty-first Century* (2002; eds. J.B. Schor & B. Taylor; Beacon) attempts to counter these notions by providing vivid examples of what a sustainable society looks like and might look like in the future. In fact, its sixteen chapters, each contributed by experts in their respective fields, not only establish the pathways to sustainability but also highlight activities and ideas that are already being actively pursued. The chapters of this anthology are interesting, informative and hopeful; all characteristics that make them ideal for casual as well as serious reading.

*Sustainable Planet* has so much to tell us about what a world would look like where waste, inefficiency, and gluttony were treated as negatives and justice, peace, community and a reverence for nature were considered ideals. Prasanna Parthasarathi, a history professor at Boston College, notes



that private property has its limitations and that it should be just one form of ownership rather than the primary one governing society. In particular, society has much to gain from expanding notions of common property, especially as it relates to resources that we all need, such as, water, air (both surface and ground varieties), fisheries and forests. Juliet Schor, a founding board member of the Center for a New American Dream <[www.newdream.org](http://www.newdream.org)>, outlines the value of promoting a new fashion ethic, one that shifts us towards organic cottons, durable natural fibers and seamstresses who are paid living wages with health benefits and away from pesticide-rich, synthetic non-renewable compounds and sweatshop labor. On a not too unrelated note, isn't anyone asking why we in the U.S. are working harder, longer hours often for less pay and less job security? Stephan Rechtschaffen, cofounder and CEO of Omega Institute (the largest holistic education center in the U.S.), challenges us to consider this question as he writes about the prospects for redistributing our time, away from the drudgery of monotonous work and towards leisure, family, and community. Mark Ritchie, president of the Institute for Agriculture and Trade Policy, reports that more and more people are buying their food locally which is having very beneficial impact economically and ecologically. He notes that parts of the Midwest, an area usually renown for its monocultures of soybeans and corn, are leading the way to more sustainable forms of agriculture through food cooperatives, farmers' markets and many community-supported farms. This taste of *Sustainable Planet* represents only a smidgen of what this wonderful new book has to offer.

Also, check out: Barry Commoner's *Making Peace with the Planet* (1992; New Press); W. McDonough & Michael Braungart's *Cradle to Cradle: Remaking the Way We Make Things* (2002, North Point); and, Julian Agyeman et al's *Just Sustainabilities: Development in an Unequal World* (2003, MIT Press).

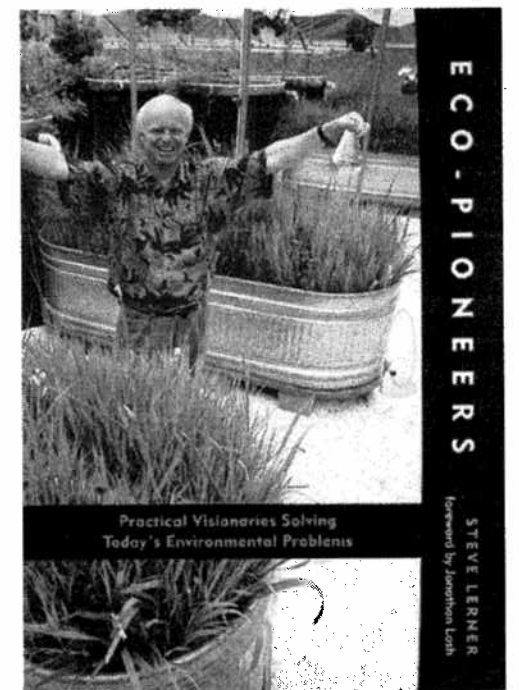


**Environmental Justice** looks at environmental issues through the lens of human equity and fairness. While this is an emergent field in environmental studies, it surely isn't without riveting scholarship. *Confronting Environmental Racism: Voices from the Grassroots* (1993; ed. R.D. Bullard; South End) is as good a place as any to start. In this twelve chapter work, a broad array of scholars, farmers, and organizers provide examples of environmental injustice throughout the United States. Whether it is the 57,000,000 housing units discovered to contain lead-based paint in 1990 (by the U.S. Department of Housing and Urban Development) or the undue burden of pesticides and incinerators that people of color endure, one thing is for sure: many communities throughout our country have

decided that they don't need to tolerate injustices like these any more. *Confronting Environmental Racism* serves as an overview of this burgeoning field of study while at the same time provides numerous examples of how dedicated individuals and community groups can lead successful campaigns to win back basic human rights, such as clear air, clean soil, and clear water. Most of us are unwitting subjects to similar forms of abuse, so it might benefit all to get more familiar with the fight that is being waged elsewhere often, not surprisingly, under the radar of the mainstream media.

Also, check out: Bunyan Bryant's *Environmental Justice: Issues, Policies, and Solutions* (1995; Island); and, Winona LaDuke's *All Our Relations: Native Struggles for Land and Life* (1999, South End).

**Action and Activism** have been key components historically in improving environmental quality. In response to many of the problems addressed in the above works, many individuals and institutions



have taken steps to make improvements. *Eco-Pioneers: Practical Visionaries Solving Today's Environmental Problems*. (1998; S. Lerner; MIT) presents the efforts of twenty-five people who have dedicated their lives to the betterment of our environment. In chapters that range in length from 10 to 20 pages, Steve Lerner, who spent four years seeking out pathfinders for environmental stewardship, provides vivid demonstrations from a wide range of areas (e.g., environmental planning, lawn care, architecture, and contaminated urban industrial sites) that one can make a difference. The stories presented are not only informative and enlightening; they are also extremely inspirational and motivational. Upon reading *Eco-Pioneers* one feels compelled to go out and do something, individually or in collaboration with other dedicated individuals and organizations. Collectively these eco-pioneers are providing examples of how to go about making society ecologically-rooted and sustainable.

Also, check out: M. Brower & W. Leon's *The Consumer's Guide to Effective Environmental Choices* (1999; Three Rivers); W.E. Rees & M. Wackernagel's *Our Ecological Footprint: Reducing Human Impact on the Earth* (1995; New Society); Julia Butterfly Hill's *One Makes the Difference: Inspiring Actions that Change Our World* (2002; Harper); and, J. Schor's *The Overspent American: Why We Want What We Don't Need* (1999; HarperCollins).

So there you have it. Pick-up one of these, read it, pass it on to a friend and spread environmental education across the continent. Obviously, ten books alone will not make one environmentally literate but they sure will help towards that end. An environmentally-informed public is a prerequisite for a healthy, peaceful and desirable future, so isn't it time for all of us to begin educating ourselves?