Walter Firey, now in his eighties, was born in Roundup, Montana, surely a symbolic birthplace for someone for whom land and resource utilization would play a key part in his life. Although Humphrey and Buttel (1982) referred to Walter Firey as one of the pioneers in environmental sociology, little seems to be known about his intellectual roots and many of his contributions have been neglected. This essay fills in one piece of the puzzle regarding the history of environmental studies in American sociology.

As for Firey’s background, during his teens Firey’s family moved to Seattle where he later received his B.A. and M.A. degrees from the University of Washington. Early in his sociological career, Firey was concerned with the environment as reflected in his research on a “logged off” area in the Pacific Northwest (Firey 1942). From Washington, Firey traveled to Harvard where he studied with Pitirim A. Sorokin and Talcott Parsons. He was also influenced by economist Joseph Schumpeter from whom he audited a course. His dissertation (chaired by Sorokin with Parsons as an active member) resulted in his most well-known work, Land Use in Central Boston (1947).

After a brief stint at Michigan State in the mid 1940s, Firey spent his academic life in Texas during which he developed a general theory of resource use detailed in his book Man, Mind and Land (1960). This body of work, we contend, is equal to his research on Boston. Yet, for the most part, it has been overlooked by sociologists. Several sociology-of-knowledge reasons may account for this oversight.

First, most readers may have found Man, Mind and Land arduous, even dense. For one, Firey formalized his argument by employing symbolic logic and lattice theory in mathematics, both of which are integrated into the text. Compounding the book’s difficulty is the lack of a meaningful summary. In an attempt to rectify this we provide a brief overview of Firey’s agenda.

Set in the South Plains of Texas and New Mexico, Firey’s work used documentary data to examine processes that emerged with respect to groundwater utilization. During Firey’s period of scrutiny (1940s-1950s) groundwater was (and still is) being mined from the Ogallala Aquifer at rates greater than can be replenished. Although his research has intrinsic value of its own, Firey was intent upon constructing a general theory of resources. Thus, he uses the South Plains as a case study along with resource utilization among the Tiv and Bemba (and related groups) in Africa and among medieval English villagers. These cases were chosen for their divergent geographical, historical and technological circumstances.

Continued on page 3.
Welcome to the Spring issue of ET&S! A theme emerges from the submissions I received for this issue—the development and continuing vitality of environmental sociology as a subdiscipline within sociology. The Douglas and Sjoberg piece on Walter Firey reminds us of the history of our field; Vaillancourt's article, upcoming conference announcements, and publications highlight current events; while Zavestoski's piece pushes us to more clearly define our work. I would invite you to comment directly to these authors and/or to the listserv for a more interactive discussion. [If you still have not subscribed, send the e-mail message: subscribe envtecsoc yourfirstname yourlastname to listserv@csf.colorado.edu]

Note that the deadline for the Summer issue is June 15th. This is a firm deadline so that I can get the Summer issue to you before you leave for the Annual Meetings in Toronto. A theme for discussion has been suggested—racial and ethnic differences in relationships to the natural environment. Of course, you are not bound by this topic, but if you have any thoughts, including resource suggestions or reviews, this is the time.

Do send submissions early if you have them! Possibilities include descriptions of your research, interesting web-sites you have developed or come across, teaching ideas, etc., as well as announcements of your recent publications and presentations. As always, feel free to contact me if you have questions.

Environment, Technology, and Society Newsletter

Editor:
Susan H. Roschke
Department of Behavioral Science
Wilson College
1015 Philadelphia Avenue
Chambersburg, PA 17201
Phone: 717-264-4141, ext. 3281
Fax: 717-264-1578
E-mail: roschkes@cvn.net

Publication Schedule:
The deadline for submissions for the Summer issue is June 15. If at all possible, please submit text items electronically or on IBM-formatted diskette, as this greatly facilitates the newsletter production process. Articles on current research that can be represented graphically on the front page are especially sought.

ET&S is a publication of the American Sociological Association, Section on Environment and Technology. The newsletter is a member benefit.

Please note that you must be a member of the ASA in order to join a Section. Contact the American Sociological Association, Membership Services, at 1722 N Street, NW, Washington, DC 20035-2981
A Message from the Chair

Gene Rosa

While I do not approach the excesses of Pangloss, I nevertheless try to be upbeat under most circumstances. Having been an environmental sociologist for a quarter of a century I have had occasion to alternately feel optimism then pessimism about our intellectual quest and about the vitality of the Environment and Technology section. In the past year I must admit experiencing some pangs, more pronounced than usual, of pessimism about our intellectual and membership growth. These pangs were principally due to the struggle we experienced in turning around the decline in memberships that had fallen below the 400 level (the level needed to have three sessions allotted to us at the ASA meetings).

Fortunately my pessimism was counterbalanced by more positive events. We were able, at the eleventh hour, to get our membership back above the 400 quota. There were also tangible intellectual markers to savor, such as the growing involvement and cooperation of other ASA sections (Political Economy of World Systems and Medical Sociology, for example) on environmental topics. Still another marker was further growth in the international community of environmental sociologists, with all the vitality that exchanges across national boundaries, cultures, and intellectual paradigms bring. The recent conference on theory in environmental sociology at Woudschoten (for details, see the section of this newsletter by Jean-Guy Vaillancourt) was a fitting imprimatur for this vitality. So, on balance there are clear signs of exciting intellectual ferment. We must continue to share our vitality with students and colleagues so that our membership reflects that vitality.

"Walter Firey," continued from page 1...

The distinctiveness of Firey's analysis rests on his contention that three major processes—ecological, cultural, and economic—shape resource utilization. For Firey, the ecological system sets limits within which the cultural and economic systems function. Building upon the perspectives of Sorokin and Parsons, Firey perceives the strong influence of culture in social systems, so much so that groups who occupy similar habitats can employ natural resources differently. In the economic system profit serves as the primary motivating factor in production and exchange activities. More generally, Firey contends that there is no single optimum among ecological, cultural, and economic systems. Instead, social systems negotiate trade-offs among the dimensions of ecological permanence, cultural consistency, and economic efficiency.

Aside from the opacity of Firey's book, its publication occurred at a time when the cultural theories of Sorokin and Parsons were being greatly revamped. In the years after the book's publication in 1960, human agency has been perceived as far more important in shaping cultural systems than Firey and others intimated. Paradoxically, during this same era, exchange theory was on the upswing in sociology and its adherents had little or no regard for the variability of cultural systems.

Yet Firey's theory still provides relevant guideposts for understanding resource use, as a case study of the Edwards Aquifer illustrates. This aquifer, which runs through south-central Texas, is the major source of water for over one million people including residents of San Antonio. Ecological limitations and ecological "unknowns" (e.g., exact flow of water through the aquifer and total amount of water available) ground the debates in this semi-arid region. In a state where "right of capture" or the assignment of private property rights to groundwater (also referred to as "the law of the biggest pump") prevails, and a still-growing populace depends upon the Aquifer, the conditions are in place to analyze interrelationships among ecological, cultural, and economic systems.

However, ongoing research of the Edwards Aquifer by Manges Douglas calls for a need to expand Firey's framework, as Firey minimized the political system and therefore the resulting power struggles over natural resources. As the current debates surrounding the Aquifer unfold, the political arena is the major avenue for negotiating compromises among ecological permanence, cultural consistency and economic efficiency. As the debates over water use have been framed and reframed over the years, the role of human agency in redefining elements of the cultural system has become increasingly clear. Thus, in 1997 one political heavyweight, in part responding to the concerns regarding water use of the Edwards Aquifer, has begun to publicly recognize water, rather than oil, as Texas' most precious natural resource.

Whatever else might be said about Firey's work, he was an "environmental sociologist" before the concept gained common currency in the discipline. As a pioneer cultural environmentalist, Firey also incorporated ecological and economic systems into his analysis. In so doing, he has challenged critics and supporters alike to formulate a more adequate theory of resource use. Firey's work, though written almost forty years ago, has a timeliness to it which warrants a second look.

References


Is There a 'Human' Ecology? A Review

by Tom Rudel, Rutgers University


Postmodernists could have a field day unpacking the intellectual baggage that has accumulated around the term 'human ecology' during the past seventy years! Under the guise of studying human ecology, home economists have studied human nutrition; sociologists have studied populations of organizations; anthropologists have examined people - natural environment interactions, and environmentalists have found a field of study which confirms their fears about the direction of human evolution. Now Lee Freese has arrived, and with these two volumes he intends to put an end to the fun (and confusion)! The works under review provide, in his words, 'a broad overview and theoretical framing of scientific human ecology.'

For Freese, human ecology provides the theoretical basis for understanding both human evolution and human uses of the earth. Part A of the supplement outlines the role of biological and ecological variables in human evolution. It begins with an outline of the different disciplines, ranging from population genetics to ecological economics, that have made contributions to human ecology. It goes on to describe the theory of natural selection and its' modern synthesis with Mendelian genetics, considers the role of symbolic behaviors in evolution, compares biological and sociocultural evolution, and presents a synthetic model of biosociocultural evolution. Freese then surveys human subsistence routines from hunter-gatherer societies to industrial societies and concludes with a discussion of how ideas about carrying capacity apply to human societies.

Part B traces out the intellectual history of human ecology from its founders in the 1920s to the recent work of organizational ecologists. It also provides a parallel history of ecology, with particular emphases on the Lotka-Volterra models of predator-prey interactions, the changing concept of the niche, and the idea of ecosystems. The latter part of this supplement discusses recent, human induced environmental problems. Freese explores the meaning of sustainability, outlines the difficulty of incorporating commons dilemmas into economic theory, and briefly considers the social bases of environmental degradation and resource depletion. This last section includes discussions of deforestation, global warming, ozone depletion, and declining energy stocks. Freese then provides an updated version of William Catton's overshoot hypothesis. Part B ends with a description of environmentalism which places special emphasis on the work of Aldo Leopold.

Several segments of Freese's work seem especially valuable to me. At a time when officials at the National Institutes of Health have taken to pleasing with social scientists to attend to the human implications of the startling advances in genetics, Freese's focus on the connections between human genetics and evolution offers a useful point of entry into this area of inquiry. The discussion of the history of human ecological thought in sociology is outstanding. Freese explains, better than anyone else, how the concerns with the natural environment in Roderick MacKenzie's Human Ecology gradually gave way, under Amos Hawley's guidance, to the narrow, exclusively sociological concerns of contemporary organizational ecologists. I should add that neither of Freese's supplements makes for light reading! They would appear to be particularly useful for two types of readers. People who are just beginning to teach environmental studies or environmental sociology should find in the many short descriptions of work in related disciplines interesting leads that they could pursue in their teaching or research. Then there are those of us in mid-career who have accumulated a body of knowledge in a specialized subfield but can not remember (!) or have not keep up with research in other areas of environmental social science. Freese's broad survey of the field should remind us of what we are missing!

New Journal of Interest: Journal of Risk Research.

In 1998, Thomson Science and Professional (an International Thomson Publishing Company) is launching the Journal of Risk Research with SRA-Europe and SRA-Japan. This is a new refereed journal, edited by Dr. Ragnar Lofstedt of the Centre for Environmental Strategy at the University of Surrey, which will be available both in print and online via the Internet. This new publication will stimulate intellectual debate on risk, addressing the growing concern about the role of risk in modern society among European and Japanese researchers, regulators, and academics. The journal will address all areas of risk perception, risk communication, and management with an emphasis on social and environmental issues. (You can visit Thomson Science and Professional's website at http://www.thomsonscience.com.)

Selected forthcoming papers... "Metatheoretical Foundations for Post-Normal Risk" by E. Rosa with Commentary by J. Ravetz; "Three Decades of Risk Research: Accomplishments and New Challenges" by O. Renn with Commentary by W. North; and "Consequences of Perceived Risk: Demand for Mitigation" by L. Sjoberg with Commentary by P. Slovic and R. Palm.

Submissions: Contact Dr. Ragnar E. Lofstedt, Centre for Environmental Strategy, University of Surrey, Guildford, Surrey GU2 5XH, UK. Tel: +44 (0) 1483 259096; Fax: +44 (0) 1483 259394. E-mail: R.Lofstedt@surrey.ac.uk
Emerging Theoretical Parameters in Environmental Sociology

by Steve Zavestoski, Washington State University

The following is a discussion of what seem to be some of the pressing issues environmental sociologists are facing in terms of establishing a theoretical grounding as the subdiscipline looks toward the next millennium. I pull together the various threads to conclude with a set of parameters within which environmental sociologists might work as we go about our research.

What is environmental sociology's theoretical lineage? When Dunlap and Catton (1978a, 1978b, 1980) called for the establishment of environmental sociology as a new paradigm for the social sciences, they only gestured at Duncan's (1961) POET model as a potential candidate to replace the dominant paradigm. But Buttel (1978) argued that the HEP/NEP distinction made by Catton and Dunlap (1978) is a distinction that is part of an ongoing debate within existing sociological paradigms, not grounds for proclaiming a paradigmatic revolution. Schnaiberg's (1980, 1994) 'treadmill of production' has been the only other significant alternative in terms of a grounding theory for environmental sociology.

Without much of a theoretical legacy, where are we headed? The failure of any perspective to unify the efforts of those working in the area of environmental sociology has led Moore, Hughes, Vaillancourt, and Tindall (see their respective chapters in Mehta and Ouellet 1995) to criticize the state of theory in environmental sociology. There is hope, however, as several environmental sociologists have begun to identify some possible parameters for environmental sociological theory. Freudenburg, Frickel and Gramling (1995) offer the idea of 'conjoint constitution' as a way of understanding how nature and society give rise to one another, and Buttel (1996) points out that we need to account for production and consumption processes which unconsciously lead to environmental change ('substructurally environmental phenomena'), as well as consciously environmental behavior such as involvement in the environmental movement and environmental policy and conflict ('intentional environmental phenomena').

Buttel argues that existing work in environmental sociology has tended to focus on one type of phenomena or the other. This is reflected in the simultaneous pull toward the global in studies of the human causes and consequences of GEC on the one hand, and toward the local in studies of the emerging role of grassroots organizations as key players in the environmental movement on the other. To some extent, the efforts of the latter form approaches to the former; at least to the extent that equity is a central issue in any discussion of global environmental policy.

Nevertheless, each of these two areas draws on its own body of theory. For instance, environmental sociologists focusing on the grassroots level of the environmental movement largely draw on existing theories of social movements. While these approaches are useful in understanding human-environment relations in the context of a social movement, they do not explain how human-environment relations are manifested in terms of environmental degradation, or human responses to anthropogenic causes of environmental destruction.

Where have we gone wrong? One possible source of this shortcoming may be the failure to address the role of humans as both part of the biological web of life, and separate from it with respect to the unique human capacities for organizing, moralizing, and self-reflection. Likewise, no approach has systematically avoided biological reductionism and sociological determinism while overcoming the nature/society dualism. Possible exceptions would be Dickens (1992), Harper (1995), and Redclift and Woodgate (in Redclift and Benton [1994]) who draw on Giddens' (1984) theory of structuration in an attempt to account for the simultaneous functioning of humans within the social and natural worlds--a characteristic they liken to the simultaneous existence of structure and agency as explained by Giddens.

What are some of the issues we have to face in order to establish a theoretical grounding? Constructivism vs. realism.

Risk researchers, who are beginning to call into question the norms of positivistic science, raise the question of what role science should play in a theory of environment and society. For instance, some have suggested that environmental problems, and their related problems of risk assessment, are too imbued with uncertainty and values to be handled solely by the traditional scientific knowledge system (Dietz, Stern, and Rycroft 1989; Rosa 1996; Funtowicz and Ravetz 1993). Once the norms of positivistic science have been questioned, the door opens for a social constructivist approach. Such an approach has been criticized since it can potentially deny the existence of an environmental problem unless it has been defined as such by the public (Dunlap and Catton 1994). Others have utilized a constructivist approach to demonstrate how environmental issues are constructed and how manipulating such constructions can gain attention for certain problems (Hannigan 1995). The question which arises is whether it is necessary to the study of human-environment relations to reconcile social constructivism and logical positivism/empirical realism?

The use of bio-ecological concepts and principles.

Human ecologists are raising another set of issues: What are the roles of the ecological, biological, and physical sciences? What is the usefulness of such terms as "complexity," "interdependence," "time lags," and other notions of the intricate nature of ecological systems for the understanding of human-environment interaction? Should we, and if so, how can we best, apply these terms to our study of human-environment relations?

The role of micro-level social psychological processes.

Postmodernists and social psychologists (Darien, in his chapter in Mehta and Ouellet 1995; Bordesssa 1993; and Weigert 1997) address the role of the self in understanding the environmental crisis. Are our conceptions of who we are, they ask, so intertwined with the consumptive ways of advanced industrial society, that to change our ways is to literally change our self-identities? This point is related to the vast literature on environmental attitudes, values, and behaviors in which some evidence

---

Continued on page 6...
suggests that norm-activation, values, awareness of consequences, and ascription of responsibility—all aspects of the self-concept—play key roles in people’s tendency to act on behalf of the environment (Stern, Dietz, Kalof and Guagnano 1995; Stern and Dietz 1994; Stern, Dietz, and Black 1986).

Where do we go from here?
From the above, it is possible to derive a few guidelines for any theory guiding environmental sociologists. Such a theory should:
1) acknowledge, although not necessarily account for, both substructurally environmental phenomena and intentional environmental phenomena;
2) account for the unique position of humans as both a part of the web of life as well as social, self-reflective, and moral beings;
3) strive to avoid biological reductionism and social determinism;
4) establish the proper relation between social constructivism and logical positivism/empirical realism;
5) determine the usefulness of ecological concepts; and
6) acknowledge the role of the social psychological process of the self in micro-level decision-making about behaviors that affect the environment.

By working within these parameters, environmental sociologists should be able to take what we know about the actual physical causes of our environmental problems as a result of empirical scientific inquiry, and use our understanding of the social construction of reality to explain how it is that human societies continue to go about the activities that are producing outcomes which we know include environmental degradation beyond a sustainable level. Out of such an approach should emerge a more unified and theoretically grounded subdiscipline positioned to apply what we know about both biophysical and sociological processes in an interdisciplinary effort that will provide practical and useful knowledge for facing environmental threats that are occurring in greater numbers and with greater frequency.

Bibliography

The Second Woudschoten Conference on "Sociological Theory and the Environment"

by Jean-Guy Vaillancourt

A broadening of environmental sociology, or ecossociology as some of us prefer to call it, to an international "invisible college" made its first grand showing at the World Congress of Sociology in Madrid in 1990 and at the First Woudschoten Symposium in Holland in 1992 on the theme "Current Developments in Environmental Sociology." It continued its development at the Colloquium on "Nature and Culture" in Chantilly (France) in 1993, at the Bielefeld World Congress of Sociology in Germany in 1994, at various other regional meetings since then in Brazil and India and most recently at the well-attended and well-organized "Conference on Sociological Theory and the Environment" in Woudschoten on March 20-23, 1997.

This second Woudschoten meeting was organized by Research Committee 24 of the International Sociological Association, and it was sponsored by the European Commission DGXII (Science, Research and Development), by the Netherlands Ministry of Housing, Spatial Planning and Environment, and the Netherlands Universities Institute for Coordination of Research in the Social Sciences (SISWO). More than 50 environmental sociologists from 15 countries were in attendance, most of them from Northwestern Europe, but some coming from as far as North and South America, Greece, Spain, Russia and Lithuania. The goal of the conference was to examine the place of sociological theory in the development of environmental sociology, and to analyze a wide range of theoretical perspectives currently used by the practitioners of our discipline. Some of the papers examined the contribution of classical theory to contemporary environmental sociology (Marx, Weber, Durkheim, critical theory, evolutionary theory) while others focused on more recent developments like constructionism, ecomodernization theory, functionalism, consumption-lifestyles theory, Ulrich Beck's risk-society approach, the globalization issue, industrial metabolism, sustainable development, the rational actor paradigm, the theory of reflexivity, green socialism, and world systems theory. Among the more well-known environmental sociologists who attended the three days conference, there were, in alphabetical order, Ted Benton, Tom Burns, Fred Buttel, Peter Dickens, Riley Dunlap, Bill Freudenburg, August Gijswijt, Marina Fischer-Kowalski, John Hannigan, A.P.J. Mol, Raymond Murphy, Mercedes Pardo, Michael Redclift, Leonardus Rinkevicius, Gene Rosa, Elizabeth Shove, Egbert Spaargaren, Jean-Guy Vaillancourt, Eduardo Viola, Oleg Yaninksy, and Steven Yearly.

The next step ahead for R.C. 24 is now the 24th World Congress of Sociology, to be held in Montreal, on July 26 - August 1, 1998. We have been allocated a total of 16 sessions for environmental sociology and the themes for these sessions were chosen by members of the board of directors at a special meeting held during the Woudschoten Conference. Thirteen of the session will be on eleven specific important environmental sociology topics (global environmental change; consumption and lifestyles; environmental movements (2); ecomodernization; environmental policy; attitudes and values (2); theory; systems, metabolism and evolutionary perspectives; sociology of risks; sustainable development; social construction of environmental problems and knowledge), and three of them will be on the current research being carried on in environmental sociology.

Conferences and Meetings

The Natural Resource Research Group of the Rural Sociological Society is sponsoring an all day symposium on August 13, 1997 in Toronto. The theme for the symposium is: “The study of natural resource dependent communities: Where we’ve come from, where we are, and where we should be going.” The first group of presenters will first review some of the classics in natural resource and community sociology. The second group of presentations will include descriptions of field work in progress or recently completed studies. We will wrap up the day with a panel discussion on where to take studies of resource-dependent communities in the future.

Presenters will include: Conner Bailey, Don Field, Roy Bowles, Lori Cramer, Sean Cramer, Peter Brown, Ralph Brown, Heather Squires, Audrey Sprenger, Michael Smith, Craig Humphrey, Bill Freudenburg, Bob Gramling. There will also be a short presentation by Dr. Peter Sinclair, winner of this year’s Merit Award for the NRRG.

Local and Global Communities: Complexity and Responsibility
IX International Conference of the Society for Human Ecology, October 15 - 18, 1997
College of the Atlantic, 105 Eden St. Bar Harbor, Maine 04609
Email: sheconference@ecology.coa.edu; Web Page: http://www.coa.edu/sheconference

NOTE: The deadline is June 15, 1997 for abstracts, organized session proposals, and roundtable preferences. All materials should be sent to: Melville Cote, Executive Director, Society for Human Ecology, College of the Atlantic, 105 Eden St., Bar Harbor, Maine 04609 (Fax: 207/288-4126)

Update: The proposed C randon mine in Wisconsin—the subject of the Keepers of the Water video reviewed in the Winter issue of ET&S—is still in the news. The river which would be affected by the mine, the Wolf River, was named the 5th Most Endangered River in North America by American Rivers in April. Also, a website maintained by one of the groups protesting the mine—http://www.earthwins.com/mola.html—contains news and links to sites by other activist groups as well as sites which include information on the proposed mine and mining in general. This website makes a nice accompaniment to the video for use in a class.

Farhar, Barbara C., Nancy E. Collins, and Roberta Ward Walsh. 1997. "Case Studies of Energy Efficiency Financing in the Original Five Pilot States, 1993-1996." *The National Energy Policy Act of 1992 and the Housing and Community Development Act of 1992 required that the Federal Housing Administration of the U.S. Department of Housing and Urban Development conduct an energy efficient mortgage (EEM) pilot program in five states. As a basis for comparative analysis, the National Renewable Energy Laboratory and the home energy rating system provider organizations in the pilot states developed case studies documenting EEMs implementation. The case studies focus on the years 1993-1996 when the EEMs program was originally being tested and additional energy efficiency financing programs were being developed. This report contains the case studies for the five pilot states.*

Farhar, Barbara C. and Ashley H. Houston. 1996. "Willingness to Pay for Electricity from Renewable Energy." This report explores the utility option of "green pricing" as a method of aggregating public preferences for renewables. It summarizes national data on public preference for renewables and willingness to pay (WTP) for electricity from renewable energy sources; examines utility market studies on WTP for renewables and greening pricing program features; critiques utility market research on green pricing; and discusses experiences with selected green pricing programs. The report draws inferences for program design and future research.

Farhar, Barbara C. 1996. REPP - Renewable Energy Policy Project Issue Brief. "Energy and the Environment: The Public View" In surveys over the past 18 years, majorities of the public have chosen renewable energy and energy efficiency over other energy alternatives—a finding important to local, state, and federal legislators; utility companies and regulators; environmental organizations; and the renewables and efficiency industries. In her synthesis of data from more than 700 polls, the author found evidence that the public wants policymakers to support a national agenda of sustainable development, and it wants energy efficiency and renewable energies to comprise increasingly large portions of the nation's energy mix. The poll data point to opportunities for industry to develop products and services and for government to create programs and policies that appeal to the public.


Love, Ruth L. 1997. "The Sound of Crashing Timber: Moving to an Ecological Sociology." *Society & Natural Resources.* 10:211-222. This article was stimulated in part by the discussion in ET&S several years ago as to whether there can be an environmental sociology that includes bio-physical variables and is not just an environmental version of long-established sub-fields such as political sociology and collective behavior.


Wenner, Lambert N., Ph.D. 1997. *The Environmental Dilemma: Optimism or Despair?* Lanham, MD: University Press of America. For countless millennia humans extended their domain around the world, gradually using more of nature's resources, but high death rates from famine, disease, etc. restricted population growth. Since 1800, innovations in technology and social structure have drastically altered both natural and cultural environments. Globally, death rates have fallen without equivalent reductions in birth rates while per capita consumption of many natural resources has increased. Many global trends are unsustainable, and prompt action is needed to avoid calamities in the decades ahead. Expanding environmental programs mitigate many trends, but fail to reverse most of them. Rival factions differ on the costs and benefits of development. Some people have grave concerns about various environmental problems, but others downplay these fears and oppose regulatory solutions. We humans have the technology, knowledge, and resources to resolve our dilemma, but lack the consensus and commitment. It is what we accomplish that counts, not what we boast of being able to do. Failure to act now can cost future generations much more than now. Environmental information is vast and expanding, but often highly technical, narrowly focused, or self-serving, underscoring the need to summarize, integrate, and interpret findings for concerned publics.