ECOLOGICAL EDUCATION: TIME FOR A NEW APPROACH

In the mid-1940's Aldo Leopold, the noted ecologist, philosopher, and writer was moved to write,

> *"If the public were told how much harm ensues from unwise land-use, it would mend its ways." This was my credo, and I still think it is a fairly accurate definition of what is called "conservation education."*
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> *Behind this deceptively simple logic lie three unspoken but important assumptions: 1) that the public is listening, or can be made to listen; 2) that the public responds, or can be made to respond, to fear of harm; 3) that ways can be mended without any important change in the public itself.*
>
> *None of the three assumptions is, in my opinion, valid.*

It is both remarkable and tragic how little has changed in the ensuing 40 years. Ecological education is still flawed by the use of the same assumptions and as a result has had little impact on society. A revolution in the approach to the teaching of ecology and conservation is long overdue. This redirection of effort must redress the erroneous underpinnings of our educational system. I would like to suggest an outline for this new beginning.

First and foremost is the need for widespread understanding of ecological principles and environmental science. These topics are more important than most of the "required" classes now taught in public schools. Everyone should receive ecological education throughout their schooling, from kindergarten to college. No one should be allowed to graduate without an understanding of ecology and environmental science and the effect of man's activities on the capacity of the environment to sustain future generations. A key part of this curriculum will be the study of the supply, use, disposal, and associated environmental costs of the energy, water, and food used in everyday life. Only an educated and aware public can be expected to act and vote responsibly.

Second, the emphasis of environmental education and lobbying efforts must be reoriented from the negative "stop the . . . , block the . . . , preserve the . . ." to the positive "restore the . . . , rehabilitate the . . . , renew the . . . ." Rather than always talking about the harm that a given project will do, we must propose solutions that will provide greater benefits.

Developing these alternatives will require hard work and the expertise of multidisciplinary teams. It can't be done without additional support both from within the environmental movement and from the regulatory agencies and decision makers. For example, I have participated in hearings where the utility industry has been represented by more than 50 attorneys, utility vice presidents, and staff. In opposition, and as events have clearly shown, representing the public interest, were two unpaid environmentalists, whose yearly income is matched by each of the utility's "hired guns" in one day.

A system for paying intervenors, used with some success by the California Energy Commission, must be established throughout the State, Federal, and local governments. This would enable ecologists and environmental scientists to provide expert constructive criticism and positive alternatives to environmentally destructive and costly projects that should never be built and legislation that should never be passed.

Another vital element in this regard is a determined and prolonged assault on the multifarious subsidies, incentives, and regulations that promote waste and environmental degradation. Man, liberal or not, is an economic animal who will act only when it is perceived to be in his best interest. Until the rules of the game are changed, no amount of haranguing, regulating, or philosophizing will protect the environment or stimulate desperately needed environmental restoration. The failure of 50 years of soil erosion education shows this as clearly as anything else.

And finally, those of us involved in ecological education and political action must more clearly enunciate our goals. Foremost among

them is the often unstated desire for a healthy and happy people living in a sustainable manner. This goal is often lost in the passionate battle to save a particular treasure, but until the public appreciates the interrelationships between their health and welfare and a healthy environment, and costs more nearly reflect total cost, these battles will continue to be lost more often than they are won. In metaphorical terms, we might say the trees are important, vital, and irreplaceable, but until the forest is appreciated and cherished by all, the trees will never be safe.

Developing a sustainable economy will require relatively modest changes in society and ourselves. It will require more strict economic accounting and a properly "conservative" approach to resource management. And it will take time, patience, and a great deal of effort. It can and must be done if we are to share a future of sustained abundance, rich in understanding, healthful, and enjoyable, with communities that bring out the very best in the human spirit.

Action:

Write: Terrance Bell
Department of Education
400 Maryland Avenue
Washington, D.C. 20202

and tell him you'd like to see ecological literacy required in the nation's schools.

Write: Robert T. Stafford and Members
Senate Environment and Public Works Committee
Washington, D.C. 20510

and tell him you'd like to see an intervenor program to cover all regulatory and legislative actions.

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Further Reading

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