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Cover: Public access to private land for snowmobiling and other outdoor recreational uses is inhibited by landowner concern about liability questions (see page 478). Soil Conservation Service photo by Erv Cole.

The Soil Conservation Society of America is dedicated to promoting the science and art of good land use, with emphasis on conservation of soil, water, air, and related natural resources, including all forms of beneficial plant and animal life. To this end, SCSA seeks through the Journal of Soil and Water Conservation and other programs to educate people that mankind can use and enjoy natural resources forever.

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A new approach to saving soil

Several articles in the September-October 1985 issue of the JSWC focused on what is needed to achieve results in conservation efforts. Each article (Scaling, Davis, Nowak) voices the historic thrust of a voluntary approach to individual farmers within a political framework. Interestingly, the early leaders of the movement (Bennett, Wilson, Wallace) supported a mandatory approach within a hydrologic framework.

If conservation planning and management were carried out on a hydrologic basis and if all land (rural and urban) were included, there would be a more logical framework for resource decision-making than presently exists. The need for conservation measures would also be more readily apparent to those who presently do not understand the problem or who doubt that one exists.

If local ordinances were established to ensure the land's protection, it would require involving a diverse group of people to elicit the needed support. Working with city people, planners, local officials, sportsmen, and environmentalists, as well as farmers, would stimulate new ideas and groups of people interested in conservation, which would lead to an emergence of stronger leaders.

Marilyn D. Lundberg
Minnesota State Planning Agency
St. Paul, Minnesota

The matter of self-interest

Richard Meyocks, in his discussion on selling soil conservation [JSWC, September-October 1985, p. 403], raises the question of self-interest. What is self-interest? Too often we define self-interest only in terms of short-term, material benefits.

Presumably, as patriotic citizens of the United States, or Canada, or whatever nation we call home, our package of self-interests includes concern for the betterment and continuation of our society and our country. Only motivation based on recognition of these self-interests, assiduously cultivated in ourselves and our fellow citizens, individually and collectively, will be effective.

Our individual and collective sense of patriotism must be invoked and cultivated on behalf of soil conservation. If we care about our society and our country, and about the preservation and extension of the human and civil rights that the U.S. Constitution purports to ensure, then it follows that we must care deeply about soil conservation. The material wealth and economic stability needed to sustain our society and preserve and protect our nation depend absolutely on the productivity and integrity of our soil and water resources.

Leonard Johnson
Oregon, Wisconsin

The cost of war!

We recently returned from Nicaragua's First National Congress on Agriculture.

Two major issues were hotly debated. The first was the wisdom of importing high technology to stimulate rapid growth in production, at the risk of attendant environmental problems and increased dependence on foreign machinery. A related question was whether to devote scarce educational resources to basic programs in agronomy and natural resource management, or to turn out more technicians to work in the countryside. There seemed to be no consensus on these two issues, but there was agreement that agriculture must be firmly based in the natural sciences.

Of special interest was a FAO-funded restoration project for the 825-square-kilometer watershed surrounding Managua. Owing to poor land use practices, the watershed is plagued with severe erosion and floods. Successful gully reclamation was attributed in part to the active involvement of small farmers who, since land reform began in 1981, have a direct stake in the land's fertility.

We found many participants in the natural resource session to be well versed in ecology and soil chemistry, but presentations were weaker in statistics and experimental design than we have come to expect in the developed world. Many experiments, feasibility studies, and resource inventories are based on only two to three years of data because most efforts began from scratch after 1979.

The war in northern Nicaragua and the U.S. economic embargo are clearly hurting Nicaragua's conservation programs and undermining long-term development of the country's agricultural potential. Aside from the obvious financial drain and physical destruction, the war has brought to a halt a pine seed program and disrupted forest, soil, and water resource inventories.

The human cost of the war has been high too. The Congress was dedicated to the memory of Mauricio Lopez Muniga, an agronomist killed last year by Contras while working on a cacao project.

Robert Coats
San Francisco, California

Mark Akeson
Davis, California

Eric Holt-Gimenez
Berkeley, California

The essays in Meeting the Expectations of the Land are concerned with the problem of recasting agriculture into a more ecologically sound, socially just system. The 17 contributors are a unique mix of environmentalists, poets and writers, nongovernmental researchers and policymakers, and new-style agrarians. Their ideas are often bold and original, but not without an eye to fundamental ecology and economics.

The soil is given appropriate emphasis, capped by Hans Jenny's inspiring essay on agriculture's most basic stuff. In reading his description of "the eternal night of the soil teeming with life," one begins to sense a level of drama and beauty that is akin to that of mountains, rivers, and forests.

A number of essays celebrate the natural relationships that have underpinned traditional agriculture with resiliency, but which are being lost in the shift to factory-type, commercial agriculture.

A recurring theme emerges around the idea that agriculture needs to rediscover its agrarian values of conservation, independence, self-reliance, family, and community. These values are threatened by public policy that has long been skewed in favor of big, industrial agriculture, says Marty Strange, co-director of the Center for Rural Affairs. Economic structure and public policy are not set in concrete, however, says Strange, and he concludes with a challenge: "Let us see if big farms prevail in an economy not biased in their favor. Let us see who survives in an agriculture designed for sustainability."

Other contributors' ecological themes also challenge agriculture's conventional wisdom. Wes Jackson and Marty Bender outline their work at The Land Institute in Kansas on perennial polycultures, cropping systems that would mirror natural ecosystems. Stephen Gliessman describes how the science of ecology can be applied to solving agricultural production problems. John Todd writes of restoring depleted ecosystems using "a vast storehouse of knowledge currently locked up in the insular reaches of academic and scientific institutions."
This 100-page report is based on a survey conducted for AFT by the University of Kansas Applied Remote Sensing Program. The report documents more than 64 different functions in 63 different systems needed to evaluate the agricultural part of a new, essential program to enhance the capacity of local decision-makers to implement on microcomputers.

Information about systems that have been successfully installed includes:
- Operating environment (hardware, graphics components needed, costs)
- Software support (training costs and options)
- Capabilities available (data entry, editing, updating, retrieval, analysis)

The report also includes:
- Guidelines for GIS capabilities to meet rural county needs
- Examples of GIS capabilities applications in resources decisions
- Questions to ask vendors
- A directory of the 36 public and private vendors whose systems are described
- A listing of 16 GISs that could be implemented on microcomputers

100 pages, 8½ x 11 inches, softbound $19.95, includes shipping and handling.