

# JOURNAL OF SOIL AND WATER Conservation

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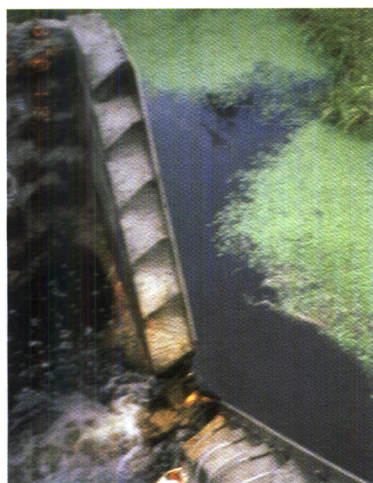
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Cover photo by D.A. Davidson shows arable land in Greece.

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## EDITORIAL

As you will have noticed from the past few issues of the *Journal*, we are developing a new "issue-oriented" format. This particular issue focuses on soil and water conservation issues outside the United States; future issues will focus on soil quality (May/June); water management in semi-arid lands (September/October); wetlands (November/December); the environmental dimensions of site-specific agriculture (January/February '96); analysis of the '95 farm bill (March/April); bioremediation technologies (May/June); ecosystem management on private lands (July/August); water issues at rural/urban interfaces (September/October); and drinking water status and trends (November/December).

If you would like to submit manuscripts for a special topic either as a feature article or as a research report, please note the subject matter and publication date in your cover letter. Remember that we need to receive manuscripts about six months ahead of the publication date to provide adequate time for review and production.

We will not, however, confine ourselves in each issue only to those topics mentioned: we will continue to publish research, features, and commentary on the same broad mix of subjects as we have in the past.

We would like to receive submissions from you on other topics, too: we are happy to receive commentary from you on any related topic. This issue we have reprinted a chapter from Lester Brown's book *Full House*, that highlights the effects that population policy has on resources world wide. Next issue you will see a legal commentary on a new ruling affect-

**May/June 1995**

Soil quality

**July/August 1995**

50th anniversary issue

**September/October 1995**

Water management in semi-arid lands

**November/December 1995**

Wetlands

**January/February 1996**

The environmental dimensions of site-specific agriculture

**March/April 1996**

Analysis of the '95 Farm Bill

**May/June 1996**

Bioremediation technologies and their environmental effects

**July/August 1996**

Ecosystem management on private lands

**September/October 1996**

Water issues: Rural urban interfaces

**November/December 1996**

Water quality: Drinking water status and trends

ing water use in the state of California. We are also beginning a column focusing on conservation education and hope to see short articles from you on projects involved with public perception of resource issues, both successful and otherwise.

We continue to receive and print letters from readers all over the world and encourage all of you to write and let us know when we do things you like, or don't like, or carry on discussion of research topics with other scholars in your field. We are also prefacing the research section with abstracts of articles from other journals on related topics: if you have published elsewhere, and think that the readers of *JSWC*

would be interested in knowing about your article, send us the abstract.

A material change that we have made in the last year is to mail your *Journal* to you without plastic bag or envelope. The plastic bag that our printer uses cannot be turned in at recycling centers, because it is the wrong kind of plastic, nor is it biodegradable. Therefore we opted to put the label right on the cover for mailing. If your *Journal* is not arriving in good condition, let us know about that too. We'll send you a new one right away if it's arriving in less than perfect condition, and if too many of you are having problems, we'll have to rethink our mailing strategy.

Lastly, though, remember that this is your *Journal*, and the editorial staff needs feedback from you to make sure that it meets your needs.

—Sue Ballantine  
Editor, *JSWC*



## P E N P O I N T S

### To the editor:

While I know the Soil and Water Conservation Society assumes no responsibility for statements made by contributors, I feel your readers would benefit from a clarification on the recent article; "Economic Impacts of Erosion Management Measures in Coastal Drainage Basin by Chin-Cheng Chang, Jay D. Atwood, Klaus Alt, and Bruce A. McCarl (Volume 49, Number 6; pages 606 - 611). The article is irrelevant and misleading since it is based on outdated information.

The article discusses the economic impacts of proposed guidelines (actually management measures) for agricultural erosion control practices under the Coastal Zone Management Act. It is important to note that the Coastal Zone Management Act's nonpoint source provisions are not proposed; they went into effect on January 14, 1993. The "guideline" discussed in the article is not a Federal regulation, nor are the final management mea-

sures that were published as guidance to the States for developing their own Coastal Nonpoint Source Programs.

In addition, one of the three analytical assumptions made in interpreting the results in this study is invalid. The analysis presented in the article is based upon the proposed management measures published by EPA for review and comment in May, 1991, which are considerably different from the final management measures published in January, 1993. The purpose of the review and comment period was to solicit input on the impact and feasibility of the proposed management measures; based upon this feedback the erosion and sediment control management measure was significantly modified. The proposed 1991 management measure required limiting erosion on cropland to the lesser of soil loss tolerance (T) or erosion produced by conservation tillage. The final 1993 management measure was to apply the erosion component of the U.S. Department of Agriculture's Conservation Management System or design and install a combination of management and physical practices to settle solids and associated pollutants in runoff delivered from storms up to and including the 10-year, 24-hour event.

Another significant caveat in the subject article is that the analysis of the impacts of the proposed 1991 management measure is limited to only the costs and benefits resulting from reducing erosion. In fact, however, the final management measure clearly reduces not only erosion but also pollutants associated with erosion such as

phosphorus, nitrogen, and pesticides. Thus, the benefits associated with the erosion and sediment control management measure are grossly misrepresented in this article.

In order to be responsive to the *Journal's* readers and the need to be accurate, I hope the *Journal* provides clarification on these points in the next issue.

Sincerely,

Thomas E. Davenport  
Deputy Chief, Wetlands &  
Watersheds

*Editor's note: This manuscript was first submitted to SWCS in 1992, and accepted—after rewrite—in April 1993. Because of manuscript backlog and staff changes, it was not typeset for publication until August 1994. We apologize to both authors and readers for the delay.*

### Growing pains for the Chinese soil conservation community

The rationale for soil and water conservation in China has never been so shaky as it is today and this provides some grave food for deep thought for the Chinese soil and water conservation research community as a whole, which, in the long-term, can only benefit the country. In a way, all such soul-searching may just be the inevitable pains for a growing-up soil conservation community in China.

Agriculture has had a long history in China and Chinese farmers are well-known the world over for their creative farming techniques which always tend to beautifully combine the natural conditions

with human innovation to produce the best result. Even in seriously eroded landscapes like the Loess Plateau in North China, Chinese farmers still seem to have succeeded in turning what is essentially a hazard of land degradation into generating wealth, thus able to improve their own lot. Local farming practices using surface runoff of eroded sediment to irrigate agricultural land and enhance crop yield are widespread even today on the Loess Plateau and ironically, they are much better than any of the soil conservation technologies prescribed by Chinese soil conservation scientists.

It is perhaps no surprise that the massive soil and water conservation campaigns waged by the government across the country ever since new China was founded in 1949, have made little headway in delivering their promised goods of reducing erosion and improving farmers' living standards. As a socialist market economy is taking root in the country during the 1990s, the future of the largely state-funded soil conservation drive now looks very precarious indeed.

Accepting that the soil conservation idea, at least in the sense it has been practiced in China for the last 50 years or so, suffers from some fundamental flaws that must be corrected in the near future may itself promise a bright future for the very cause of preserving soil and water resources, which Chinese soil conservation scientists originally wished to achieve. Should this be the case, then several new stances must be taken by the somewhat self-indulgent Chinese conservation establishment.

*Pen Points is a forum for readers to comment on material that has been published in the JSWC or on land and water management issues in general. Readers are invited to express their views in a letter to the editor. Letters are judged on their clarity and pertinence to natural resource issues. Long letters may be shortened. Send letters to Editor, JSWC, 7515 Northeast Ankeny Road, Ankeny, Iowa 50021-9764; fax (515) 289-1227—Editor.*



The first position to take is that ivory-tower researchers must realize that on matters concerning the rational use of soil and water resources, they are not much better than the local farmers, at least not to the degree as they have so often taken for granted. This practically would mean soil conservation scientists need to mix with local farmers, listen to their concerns, and help solve their problems. For China in particular, soil conservation scientist must above all be good communicators.

The second position is more philosophical and it involves a fundamental shift in the modern soil conservation paradigm. For a developing country as populous as China, conservation just for conservation's sake simply will not work. A new perspective featuring more effective utilization of limited soil and water resources must then be established to replace the conventional soil conservation idea. In other words, the new perspective needs to make better use of natural resources while getting the soil loss problem solved along way.

One stone can, and indeed should, kill two birds or even more. As to natural resources management, that was the idea advocated by the famous Confucian philosophy some 2,500 years ago. It is therefore nothing new, but simply something forgotten by contemporary Chinese soil conservationists who seem to have been too ready to accent what they regard as a more modern (thus better) paradigm of conservation just for conservation's sake.

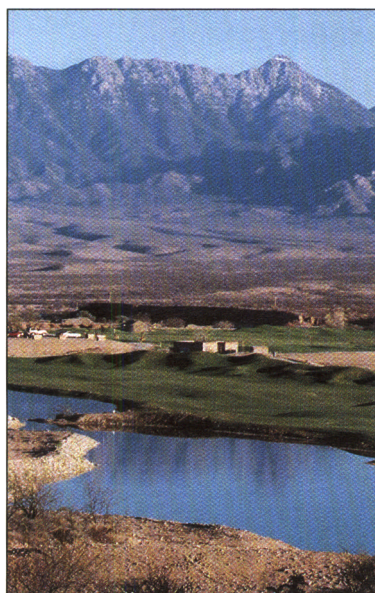
The third stance Chinese soil conservation scientists must take is that they must be good at forming alliances with scientists from related disciplines such as agricultural sciences, ecological sciences, and geographical and economic sciences. To say this is in no way meant to belittle the potential role soil conservation scientists could play, but rather

a reaffirmation that soil erosion and social development is essentially a comprehensive problem, its solution must also be interdisciplinary.

Chinese soil conservation scientists have experienced serious setbacks in going about the erosion control problem all alone, and in so doing, they in fact did not go very far. But the lessons are hard to ignore.

In one sense, the growing pains Chinese soil conservation scientists have been experiencing are not limited to China alone, it may be a universal phenomenon. As such, soil conservation scientists elsewhere may need to learn from their Chinese colleagues' current predicament.

*You Qin Li  
Saiyi Liu,  
Aiping Liu,  
Lanzhou, China*



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## BOOKS, ETC.

**Rural By Design: Maintaining Small Town Character.** By Randall Arendt, with Elizabeth A. Brabec, Harry L. Dodson, Christine Reid, and Robert D. Yaro. 441 pp., 1994. Planners Press, American Planning Association, 1313 E. 60th St., Chicago, IL 60637.

Randall Arendt and his colleagues have produced a genuinely useful book. *Rural By Design* offers sound advice to citizens and planners who are struggling to maintain a sense of place as their communities change. It will also be of interest to students of rural affairs and urbanization, and to conservationists who work on the fringes of urban areas.

Arendt became a popular lecturer on small town planning after the 1988 publication of *Dealing With Change in the Connecticut River Valley*, a regional design manual so well illustrated that planners throughout the nation rely on it for examples of sensitive land development (Yaro). *Rural By Design* incorporates material from *Dealing with Change*, but addresses a broader range of issues. It also states the general principles Arendt believes should be followed in planning for small towns and the surrounding rural landscapes.

A book of this length could be intimidating to lay people and overworked town planners, but the extensive use of graphics and four-part format make it easily accessible. Arendt presents the essence of his approach in just 63 pages in Part I, "The Character of Towns." He lists the design features that underlay the sense of community found in traditional small towns, contrasts conventional development patterns with traditional, and suggests useful techniques for public involvement in planning and design.

Contributing authors Dodson and Reid illustrate the principles set forth in Part I with the de-

tailed case studies of Part II, "Alternative Scenarios for Conservation and Development." They use great graphics to contrast conventional and creative patterns for the development of shoreline sites, the growth of an existing village, and commercial in-fill along a major road.

Part III, "Implementation Techniques" makes *Rural By Design* a good initial reference on affordable housing, road standards, and other issues that arise as small places grow. I have found Chapter 9, "Development in Town Centers and Along Highways" helpful in my work, and note that Brabec's contribution on "The Economics of Preserving Open Space" would have saved considerable research on a recent greenway project.

Part IV provides brief case studies of actual developments that maintain small town character and open space. Planners will find this material extremely valuable in showing how sensitive development can be successful.

*Rural By Design* does have limitations, including its title. If you are involved in planning for the rural America of farmers, miners, and mill workers, you may be disappointed. As the subtitle accurately indicates, this book is about maintaining the character of small towns that are being incorporated into expanding metropolitan areas or becoming one of those urban outposts we call resorts.

Second, Arendt attributes many liabilities of modern suburban development to "conventional" zoning and subdivision regulations. Yet suburban development turns out much the same in places that have no zoning. Rural communities are best served by creative land-use controls, but attacking conventional zoning dilutes Arendt's arguments. Like the filling of a wetland, conventional zoning is a symptom of the tendency to simplify living systems that results from the single-

minded pursuit of short-term economic objectives.

Third, most of the case studies in *Rural By Design* come from the northeastern U.S. Arendt never addresses the possibility that the development pattern he advocates may be less suitable for other regions. One wonders, for instance, whether the visual enclosure that prevails in the woods of New England makes clustering more effective than it would be on the sagebrush steppes of Wyoming. Also, many of the examples rely on common ownership of open space. Are people in the northeast more willing to cooperate in such arrangements than people in other regions?

Finally, despite Yaro's chapter on "Regional Contexts for Growth Management," the case studies are all of individual developments. Likewise, the techniques explained in the chapters on open space protection operate at the site scale. Protecting our natural assets requires a vision of the entire landscape. *Rural By Design* would be even better if it did more to incorporate the perspectives of landscape ecology.

*Rural By Design* is the most useful recent addition to the planning literature. It offers an excellent balance of theory, practical advice, and helpful examples for everyone interested in the future of urbanizing communities.

—Review by Lee Nellis, consulting planner, Pocatello, Idaho.

### REFERENCE CITED

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### General

*The Environmental Imagination: Thoreau, Nature Writing, and*

*the Formation of American Culture.* By Lawrence Buell. 608 pp., 1995. Harvard University Press, Customer Service, 79 Garden Street, Cambridge, MA 02138; phone: 1-800-448-2242. \$35.

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*Losing Ground: American Environmentalism at the Close of the Twentieth Century.* By Mark Dowie. 400 pp., April 1995. The MIT Press, 55 Hayward Street, Cambridge, MA 02142; phone: 800-356-0343. \$25.

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\$16.95, paperback.  
*Partly Sunny: The Weather Junkie's Guide to Outsmarting the Weather.* By Alan Fields. 200 pp., 1995. Windsor Peak Press, 1223 Peakview Circle, Suite 900, Boulder, CO 80302; phone: 800-888-0385. \$12.95 paperback.

*Trends '93: A Compendium of Data on Global Change.* Thomas A. Boden, Dale P. Kaiser, Robert J. Sepanski, and Frederick W. Stoss. 984 pp. with appendices, 1994. Copies available from the Carbon Dioxide Information Analysis Center, P.O. Box 2008, Oak Ridge, TN 37831-6335; phone 615-574-3645.

## Agriculture

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## Ecology

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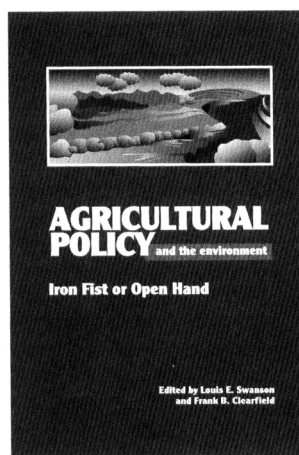
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