**On the Cover**

Architect Malcom Wells' house is easy being green.
Photograph by John M. Morgan, Beallsville, Ohio.

---

**80A**

THE BEST BUILDINGS CAN'T BE SEEN
Read about an architect who is designing buildings within the landscape.
By Carol Steinfeld

**84A**

FAR OUT ENVIRONMENTAL MONITORING
How current satellite data helps monitor the world's waters for quality.
By Sharon Guynup and Nicolas Ruggia

**86A**

ASSURING ACCOUNTABILITY
How can conservation programs be accountable at multiple levels and communicate successes in more useful ways.
By Andrew P. Manale

---

**DEPARTMENTS**

**70A**

HOME FRONT
A Viewpoint from the Soil and Water Conservation Society Executive Director

**73A**

VIEWPOINT
A Guest Editorial Written by a Leading Conservation Professional

**75A**

RAISE YOUR VOICE
Letters to the Editor

**76A**

NOTEBOOK
Conservation News You Can Use

**90A**

CONSERVOGRAM
The Soil and Water Conservation Society in Action
RESEARCH EDITORIALS

170 SOIL QUALITY: SIMILAR GOALS, BUT DIFFERENT PATHWAYS  
J.A. Delgado and C.A. Cox

171 SOIL QUALITY: HUMANKIND'S FOUNDATION FOR SURVIVAL  
D.L. Karlen, J.W. Doran, B.J. Weinhold, and S.S. Andrews

180 DEFICIENCIES IN THE SOIL QUALITY CONCEPT AND ITS APPLICATION  

RESEARCH

188 WATERSHED-LAKE WATER QUALITY MODELING: VERIFICATION AND APPLICATION  
K.R. Mankin, S.H. Wang, J.K. Koelliker, D.G. Huggins, and F. deNoyelles

198 OPTIMIZING THE PLACEMENT OF RIPARIAN PRACTICES IN A WATERSHED USING TERRAIN ANALYSIS  
M.D. Tomer, D.E. James, and T.M. Isenhart

207 AMMONIA VOLATIZATION TRENDS FOLLOWING LIQUID HOG MANURE APPLICATION TO FORAGE LAND  
B.D. Lambert and E.W. Bork

214 FIFTY YEARS OF CROP EVAPOTRANSPIRATION STUDIES IN PUERTO RICO  
E.W. Harmsen
RAISE YOUR VOICE

YOUR FORUM TO REACT TO PUBLISHED ARTICLES, TO EXCHANGE IDEAS, AND DESCRIBE INNOVATIVE APPROACHES TO CONSERVATION INCLUDING LEGISLATION

Don't underestimate executive director position

Steve Lovejoy (March/April 2003) has outlined quite thoroughly the marks of an effective Soil and Water Conservation District (SWCD) and its governing body (i.e., supervisors, directors). It cannot be doubted that dedicated, highly motivated, and well-informed leaders are essential.

I would only emphasize the vitally important, useful, and complementary role of a district-employed executive director—a key staff member charged with responsibility for day-to-day, hands-on oversight and management of district programs, projects, and finances, as well as on-the-job supervision of other district employees. Members of the elected board of directors—however well intentioned they may be—usually will not be able to devote the time and attention needed to perform this necessary function.

—Leonard C. Johnson, soil and water conservation specialist (Retired), Cooperative Extension Service, Moscow, ID

Crack or chasm

Craig Cox's editorial on 'Closing the Conservation Gap' (January/February 2003) clearly explained that despite billions of dollars expended, countless hours of dedicated conservation professionalism, and thousands of innovative efforts by conservation-minded landowners, we simply do not know where we are relative to achieving our mission. Craig laid a provocative question at our feet; how can we advance the art and science of resource management if we don't know where we started, where we are, or where we need to go?

The reason why we have been unable to answer this question is found at different levels in the conservation community. Let me suggest three starting points for discussion. First, is the emphasis on bureaucratic accountability where conservation is now 'measured' by some combination of dollars spent or acres protected. This trend is accelerated by our penchant to develop new programs characterized by the latest "buzz" words (e.g., sustainable, ecosystem, participatory) rather than trying to understand how to make existing programs more effective. Second, is what might be called operational myopia where the true believers largely communicate with the converted in a context of competing fiefdoms of state and federal agencies all scrambling for too few dollars with too many strings attached. We are so busy competing for scarce funds among ourselves that we fail to communicate with the larger public except for a few token propaganda efforts. Finally, is the on-going triumph of equity over disproportionality in guiding our resource management programs. Programs and managers dictate that we must treat all land users equally, while ignoring the fact that it is a very small minority of landowners on an even smaller percentage of the land area that cause a disproportionate amount of the resource degradation problems. Yet a worst first approach remains an anathema in the conservation community.

How are we going to close the conservation gap? I think the appropriate response is that we cannot answer that question until we determine if the gap is a crack or a chasm. The answer to that, of course, is based on addressing the three points listed above.

—Pete Nowak, soil and water conservation specialist, University of Wisconsin, Environmental Resource Center, Madison, WI

Impetus for research and education

Each Spring I begin my environmental soil science course with an overview of the numerous domestic regulatory agencies, laws, and legislative acts that govern our interactions with the environment in this country. Most of my students, even with a reasonable familiarity with these laws and agencies, are not fully aware of the extensive power granted our government over our actions.

As a result, many students are taken aback and, almost without fail, heated discussions over personal freedoms and property rights issues develop. The point that these discussions generally arrive at is that we are extremely fortunate to live in a society that is able to concern itself with the higher-order issues of environmental stewardship in the first place.

The contrast to, and perspective on our condition in this country, provided by the article entitled: "Afghanistan’s Environment Ravaged by War" (March/April 2003) is significant. The United Nations Environment Programme (UNEP) assessment of the state of the environment in Afghanistan, resulting from decades of conflict and wanton, individual, single-minded exploitation of that country's natural resources, should be a wake-up call for us all—regardless of our political viewpoint. The article is a horrific expose on the consequences of unchecked, unregulated, unsustainable human impact on the environment.

Thank you to the Journal of Soil and Water Conservation for including such an informative, paradigm-adjusting article in your most recent past issue. I plan to make good use of it in my classes. It may not provide a means to achieving political or methodological consensus on environmental issues, but it does provide clear impetus for continued research and educational efforts geared toward local and global resource stewardship.

—Grant Cardon, associate professor of soil science, Colorado State University, Ft. Collins, CO

Readers are invited to express their views on land and water management.

Please make your letter less than 150 words. Letters may be edited for length and clarity.

Send to Editor:

deb.happe@swcs.org
fax 515-289-1227
Journal of Soil and Water Conservation,
945 SW Ankeny Road,
Ankeny, IA 50021-9764
— Deb Happe, Editor

JJA 2003 VOLUME 58 NUMBER 4 75A