



50A

Soil scientist Jane Johnson is evaluating corn stover and soil conservation as part of the REAP effort. Photo by Kathy Eystad.



57A

Total dissolved solids are a probable cause of biological impairments in mountain streams in the southern coalfield areas of Virginia.



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South German landscape called Hohenlohe. Photo by Achim Prill.

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HOW RAPIDLY DOES SOIL FORMATION OCCUR AND WHO KNOWS?

In the November/December 2006 issue [Journal of Soil and Water Conservation 61(6):391-397], D. Mandal et al. stated that "theoretically, we could afford to lose soil [through erosion] at the rate at which soil forms" through chemical transformation (weathering) of mineral parent material. These authors cite Pimentel et al. (1976) as their source of estimates of the rate of soil formation.

Certain oft-cited and unavoidably imprecise estimates of soil formation have traced a tortuous path through the published literature in recent decades. Pimentel et al. (1976) cited Hudson (1971), who in turn had relied on a speculative assessment offered by Bennett (1939) regarding rates of soil formation.

In addition to Bennett, Pimentel et al. also cited Gustafson (1937) and Owen (1971) (who had little of original or independent value to offer) in formulating their finding that soil may be formed "... under natural conditions at a rate of 1 inch in 300 to 1,000 years."

A decade later, in a second edition, Hudson (1981) completed the loop by citing Pimentel et al. (1976) rather than Bennett as his source of soil formation rate estimates. Soon thereafter Schertz (1983) and Schumm and Harvey (1982) cited Pimentel et al. as their source of expert opinion on this matter.

Thus, out of this mini-miasma of circular and interlocking citations, D. Pimentel appears to have emerged as the "go-to guy" for opinions bearing on the rate of soil formation.

However, the nearest we have to primary sources on this question are speculative guesses and deductions long ago recorded in the writings of such notable scientists/scholars as T.C. Chamberlin (1909), H.H. Bennett (1939), H. Jenny (1959), and C.E. Kellogg (1936, 1941, 1948), keen and thoughtful observers who personally were deeply involved in geology and pedology.

*Leonard C. Johnson
Moscow, Idaho*

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Editor's Note

Leonard C. Johnson is a retired soil conservation specialist with the Cooperative Extension Service, United States Department of Agriculture. His article "Soil loss tolerance: Fact of myth?" in the May/June 1987 issue, Journal of Soil and Water Conservation 42(3):155-160, continues to inspire debate and citation.

WHAT TO DO WITH CSP

In the March/April issue [Journal of Soil and Water Conservation 62(2):22A], Craig Cox indicated that he and many others have never fully understood the original intent of the Conservation Security Program (CSP).

In fact, US Senator Tom Harkin himself, the lead architect of CSP, has lost sight of the original program he sold to the conservation community. He now wants to change the program so more organic farmers can qualify. This is understandable since they constitute part of his political base and he is pandering to them with little regard to the impact "organic" production has on conservation. Organic production is not a conservation practice! In fact, because of extensive tillage and a ban on modern technology in plant breeding that would reduce pesticide use, organic farming can be negative to the environment because it increases pollutants.

CSP has morphed into a system that shows how to qualify for more payments instead of a reward for past conservation efforts. The USDA Natural Resources Conservation Service is responsible for all aspects of the program, including the watershed approach for eligibility, which they determined would be necessary to prevent being overwhelmed by applications. Huh? Is it that hard to determine farmers worthy of conservation payments? Aren't there local districts already in place capable of identifying them?

Those of us who understand true conservation of working lands know that the less tillage the farmer uses, the more effective a conservation practice becomes and the ultimate goal is no-tillage. Two simple questions would suffice for CSP sign-up: (1) Do you use no-tillage? If the answer is no, come back and apply when the answer is yes. (2) What additional conservation practices are you using? Wouldn't this make more sense than the current bureaucratic nightmare known as CSP sign-up?

Two other concerns voiced by Cox are that increased funding is needed every year to maintain the current program and

the program doesn't spur adoption of new conservation efforts of farmers. The answer to the first question is simple. Fund the first year only and don't commit funds for up to 10 years. This would allow a greater number of producers to participate, which would make CSP more palatable to the public. CSP's stated purpose was not to adopt new practices directly, but one would hope it would spur additional conservation when farmers decided they would get paid for their efforts.

Unfortunately, much of the mess with CSP can be traced back to former NRCS Chief Bruce Knight, who was a bureaucrat, not a conservationist. He was a self-described no-tillage farmer from South Dakota who decided that since no-tillage made farmers money they didn't need any incentive from the government to adopt that practice. Knight didn't understand the addiction known as tillage. Knight has moved on, and we should send the present form of CSP with him.

*Jerry Crew
Webb, Iowa*

PARTNERSHIPS FOR CONSERVATION

In the March/April 2007 issue [Journal of Soil and Water Conservation 62(2):24A], there was an article on Jason Selvog who is a Pheasants Forever employee that works out of the USDA Natural Resources Conservation Service (NRCS) office in Stearns County, Minnesota.

Jason and Vince Manderfeld (Stearns County Soil and Water Conservation District technician) both work diligently with the local USDA Farm Service Agency (FSA) and landowners in order to put and keep land in the Conservation Reserve Program (CRP). From the time CRP was introduced in the 1985 Food Security Act, Pheasants Forever has seen that CRP results in a tremendous benefit to wildlife. This and other organizations have therefore been very strong supporters and lobbyists for this program.

Also in the article was a picture of Steve Welle. Steve was one of our "Stearns County River Friendly Farmers" in 2004. He is an outstanding conservationist and has planted over 7,000 trees and seeded native grasses on 21 acres of buffer strips along a tributary of the Sauk River. Steve

also does nutrient management, erosion control, and pest management.

Thank you for highlighting how all these people are important contributors in the conservation effort.

*George J. Mohrhauser
Stearns County NRCS
Waite Park, Minnesota*

RAISE YOUR VOICE

Readers are invited to respond to published articles and express their views, experiences, and ideas related to soil and water conservation. Please send your letters to the editor (mark.anderson-wilk@swcs.org). Letters may be edited for length and clarity.