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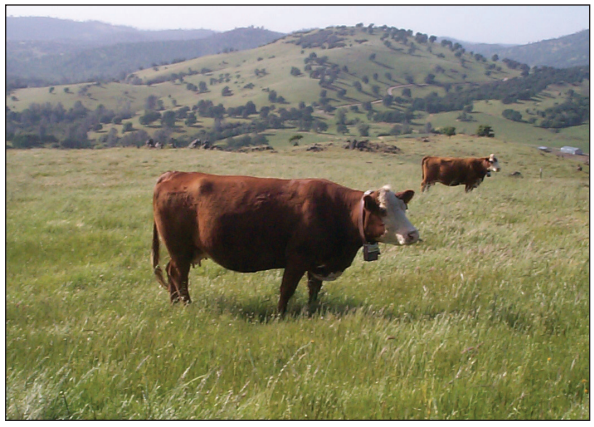
JOURNAL OF SOIL AND WATER
CONSERVATION
The art and science of natural resource management for sustainability

CONTENTS

On the Cover
Snow and field.
Photo by S. Coffman.

Recent research demonstrates that strategic placement of nutrient supplements can be an effective tool for altering beef cow distribution during the dry season, thus minimizing the environmental impacts of grazing livestock.

For a summary, see page 24A.
For the full paper, go to page 11.



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Readers' forum

Focus on soil functions, not symptoms

Many articles continue to focus on tools and symptoms instead of solutions to natural resource problems. Tools—such as models (to predict the symptoms of erosion, sedimentation, runoff, pollution, etc.), conservation programs, and best management practices—are just that, tools. In the hands of a skilled practitioner with a clear understanding of the problem to be solved, tools can work wonders.

Soil erosion and impairment of water quality are symptoms of soil that is not fully functional. The real issue we face today is that many well-intentioned and industrious conservationists do not have a working knowledge of how soil is supposed to function. In addition, few know how the management of agricultural soils impacts how well soil can perform its functions (regulating water, sustaining plant and animal life, filtering and buffering and cycling nutrients). T. Francis Shaxson's letter in the September/October 2007 spoke to the lack of soil function as the root of the problem we are striving to address. I think Mr. Shaxson has hit the nail on the head!

Soil quality is defined by the USDA Natural Resources Conservation Service Soil Quality Team as "… how well soil does what we want it to do. More specifically, soil quality is the capacity of a specific kind of soil to function, within natural or managed ecosystem boundaries, to sustain plant and animal productivity, maintain or enhance water and air quality, and support human health and habitation. Soil organic matter and soil biology play a major role in soil quality." Understanding soil quality is also understanding the hydrologic cycle, the carbon (energy) cycle, nitrogen cycle, phosphorous cycle, and soil biology, and how they are all inextricably linked.

In his letter, Mr. Shaxson made the point that the soil is a biologic system that hosts the water, nutrient, and energy cycles on which plant and animal life depend. The sooner we heed Mr. Shaxson's words and understand soil quality, the sooner we will truly become skilled practitioners of the soil and successfully address natural resource problems instead of simply measuring the symptoms.

Jon Stika
SWCS Fellow

Summaries helpful

I really like the Tech Transfer Briefing pages. I don't always have time to read through all of the detailed research articles in the journal. With the Tech Transfer summaries, I can quickly determine if the topic is something I should read more detailed information on and then I can flip right to the full research piece. This new feature will help me balance my continued learning with my heavy workload. I really appreciate it.

Sarah VanDelfzijl
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Correction

Volume 62, Number 6 (November/December 2007) contained the following error. On page 458 of White et al. (Sediment retention by forested filter strips in the Piedmont of Georgia), the labels were missing from the y axis (travel time). The tick marks from bottom up should have read 0, 10, 20, 30, 40, 50, and 60 sec m^{-1}).

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