

# Is Soil Erosion Stealing Your Farm?

DENNIS R. EPPLIN

MT. VERNON, ILL.



**Y**ou may have noticed that recent soil erosion has been severe. The erosion process is not new; it has always taken place and always will. In pristine conditions, geologic erosion is a natural process. However, soils with minimal protective

cover can be subject to excessive erosion.

Raindrops fall at velocities reaching 30 feet per second. They hit the soil like “bombs” and splash particles as far as 5 feet from where they hit. The dislodged soil particles can then be easily moved by flowing water.

Many factors are involved, but the rainfall amount and intensity are critical. Southern Illinois has certainly had a number of rainfall events in the first few months of 2008. Rainfall records and estimates for Carbondale indicate more than 26 inches of precipitation by mid-April. Rainfall on February 5 approached 4 inches, and 8.46 inches of rain fell over March 18 and 19. An additional 5.67 inches of rain fell in just the first half of April. Conditions near Anna were even worse with more than 21 inches of rain during the 60-day period of mid-February to mid-April.

Yes, it really has rained! The fluctuating temperatures with warm/cold and freezing/thawing also contributed to soil losses. That loosened and heaved soil was very susceptible to the intense rainfall. The soil that was moved was generally the most productive topsoil with valuable nutrients.

The gully erosion that is most obvious, does not always remove the most soil. Splash, sheet, and rill erosion can be extremely destructive. Sedimentation is a result of erosion, and it creates another set of challenges.

Early 2008 weather has reminded us that soil erosion is still a serious concern. Farmers and landowners should review and update their farm conservation plan. There may be instances where conservation structures are indicated. Conservation tillage, especially continuous no-till, can help manage the erosive potential. Economics often dictates crop rotation; however, crop rotation will impact soil erosion.

Managing soil erosion can be a bit of a “juggling act.” Work with the USDA NRCS, University of Illinois Extension, and your local county soil and water district to do the best job possible. The reward is the assurance that your land and soil resource will remain productive. Δ

*Dennis R. Epplin is Extension Educator, Crop Systems, with the University of Illinois at the Mt. Vernon Extension Center.*