

Carbon cycling in forest soils research presented

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Just as individual humans have different microbial communities in their guts, the microbial communities living in soils vary from site to site as well. Recent research compared the decomposition rates of wood stakes over eight sites to gain an understanding of soil microbes in forests. The activity of soil microbes can also tell a story of the value of carbon storage in soil.

The "Belowground Wood Stake Decomposition in Forest Soil" presentation planned at the Managing Global Resources for a Secure Future ASA, CSSA, SSSA International Annual Meeting in Tampa, FL, will address this important topic. The symposium will be held Monday, October 23, 2017, at 8:45 AM. The meeting is sponsored by the American Society of Agronomy, Crop Science Society of America, and the Soil Science Society of America.

"Because [soil](#) carbon is the largest terrestrial carbon pool, understanding how it is regulated has important implications for policy and land management decisions," says presenter Mary Beth Adams, US Forest Service. "We used standardized wood stakes as an index of belowground decomposition processes, to help us understand how carbon cycles in the soil. "Decomposition of these buried wood stakes was generally fastest at the warmest sites, unless those sites were very wet. The fungal community showed the most variability among the different types of microbes. Generally, the variability of fungi within a site was as great, or greater than, the variability across the eight sites. Thus more than temperature affects [wood](#) decomposition; it is also regulated by the soil

microbial community, which reflects soil moisture as well."

Provided by American Society of Agronomy

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