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SA’s Soil Carbon and Greenhouse Gas Emissions Community has a broad and international membership, spanning 44 countries and 49 U.S. states. Our membership list contains more than 1,000 individuals with interest in this important component of ASA’s Environmental Quality Section. The community focuses on research, education, and extension of technologies, practices, and systems that will produce food, feed, fiber, and fuel while mitigating greenhouse gas (GHG) emissions. Dynamics of GHG emissions and stock changes in soil organic carbon (C) with time and space are key elements of this community. Fluxes of carbon dioxide (CO₂), nitrous oxide (N₂O), and methane (CH₄) to and from soil are being assessed from a diversity of environmental and edaphic conditions, management approaches, and temporal and spatial scales. The community recognizes that modeling of GHG emissions is needed, as are strategies to educate and transfer technologies to the global community.

At the 2013 Annual Meetings in Tampa, FL, the Soil Carbon and Greenhouse Gas Emissions Community will be sponsoring several sessions to attract the interest of members, including a symposium on “Soil Carbon and Greenhouse Gas Emissions: Measurement to Modeling.” Invited specialists will provide guidance on:

1. Establishing quality baseline data with discussion on available assessment methods and standardized protocols for soil measurement, including setting quality baseline and sample archiving;

2. Reviewing issues surrounding GHG (CO₂, N₂O, and CH₄) measurements, chamber design, flux calculations, integrating space and time, and converting to carbon equivalents;

3. Outlining statistical procedures to calculate cumulative flux and how to assess ephemeral “hot moments”;

4. Presenting modeling approaches to scale-up from empirical to regional or national scales;

5. Summarizing strategies for avoiding common pitfalls and providing practical recommendations for choosing an appropriate method.

In addition, the community expects to host a number of oral and poster topic sessions for volunteered submissions, which can be found on the community web page: agronomy.org/membership/communities/soil-carbon-and-greenhouse-gas-emissions. The community will also host a graduate student poster competition this year.

To add the Soil Carbon and Greenhouse Gas Emissions Community to your ASA membership, visit: agronomy.org/account/communities/association. For more information, visit our website or contact one of the following:

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