

**Committee on Developing a Research Agenda for Carbon Dioxide Removal and Reliable Sequestration**

***Webinar on Terrestrial Carbon Sequestration***

**September 14, 11 AM EDT**

***Webinar Objective: To provide an introduction to terrestrial carbon sequestration and explore the costs, challenges, and benefits of introducing management practices and land use changes that increase C sequestration.***

**AGENDA**

- 11:00      **Opening Remarks**  
*Keith Paustian, Committee Member*
- 11:10      **Quantifying Opportunities for CO<sub>2</sub> Removal through Regeneration of US Forest Land: An Initial Estimate**  
*Al Sample, George Mason University*
- Dr. Sample will discuss the total potential carbon removal that could be obtained by regenerating lands deforested in large-scale disturbances such as wildfires, pest infestations, and timber harvesting. He will also discuss the need for additional research to characterize the technical and financial feasibility of actions to increase carbon removal, integrating spatial with ground-based data.
- 11:30      **Q&A**
- 11:35      **Global Potential and Impacts of Terrestrial Carbon Sequestration Measures**  
*Pete Smith, University of Aberdeen, UK*
- Dr. Smith will explore the global potential for carbon sequestration in vegetation and soils through soil carbon sequestration, biochar, afforestation/reforestation and natural ecosystem restoration. He will present the impact on a range of other indications (e.g. GHG, land, water, physical climate impacts, energy and costs) and compare these biological sequestration options with other engineered greenhouse gas removal options.
- 11:55      **Q&A**
- 12:00      **Managing Carbon Sequestration through Soil Health**  
*Stephen Shafer, Soil Health Institute*
- Managing soil health can be the means to achieve many desired ends in agricultural production and environmental quality. Management principles and actual field practices implemented to enhance soil health also support the physical, chemical, and biological processes that capture carbon dioxide from the atmosphere and sequester it in soil, providing many benefits to food production and soil, water, and air. This presentation will provide an overview of these principles, some management practices, and the actions

that the Soil Health Institute advocates and supports to promote soil health on a broad scale.

12:20 **Q&A**

12:25 **Economic and Policy Considerations for Soil Carbon Sequestration**

*Sian Mooney, Arizona State University*

Dr. Mooney will discuss economic considerations that affect opportunities to sequester additional soil carbon in agricultural soils. She will discuss needed producer incentives, their impact on producer adoption of management practices to sequester additional soil carbon and the relationship between incentive structures, policy design and overall economic costs. The value of co-benefits and their relationship to soil C sequestration will also be examined.

12:45 **Q&A**

12:50 **Follow-up questions/comments**

1:00 **Adjourn Webinar**